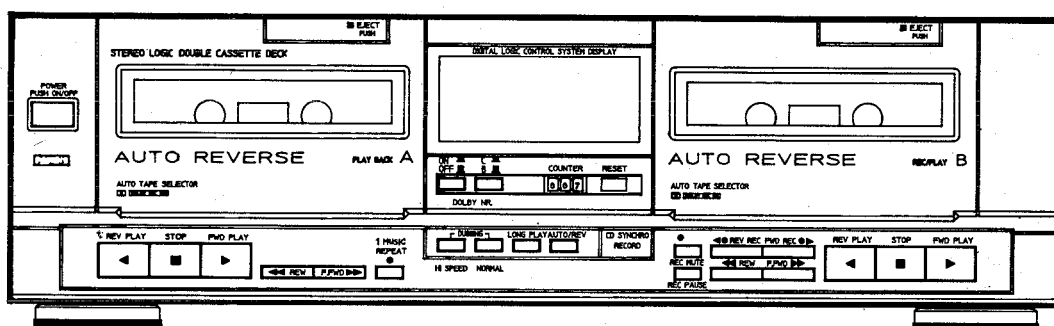


**SAMSUNG**

# SERVICE MANUAL

## RS-1200D

### STEREO LOGIC DOUBLE DECK



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# 1. SPECIFICATION

## GENERAL

VOLTAGE SOURCE .....	DC 20V
POWER CONSUMPTION .....	15 W
DIMENSIONS .....	420(W) x 115(H) x 260(D)mm
WEIGHT .....	4.8Kg

## MECHANICAL

TAPE SPEED .....	3KHz $\pm$ 1%
WOW & FLUTTER .....	0.1% (WRMS)
F.FWD/REW TIME .....	110SEC (C-60)

## ELECTRICAL

LINE OUTPUT (DOLBY LEVEL) .....	510mV $\pm$ 1dB
LINE INPUT .....	400mV
T.H.D. ....	2.0%
S/N .....	DOLBY NR OFF $>$ 50dB DOLBY NR B ON $>$ 60dB DOLBY NR C ON $>$ 70dB
ERASING EFFECT .....	70dB
SEPARATION .....	60dB (W/FILTER)
FREQUENCY RESPONSE .....	NORMAL 63Hz-14KHz $\pm$ 5dB CrO <sub>2</sub> 63Hz-14KHz $\pm$ 5dB METAL 63Hz-14KHz $\pm$ 5dB

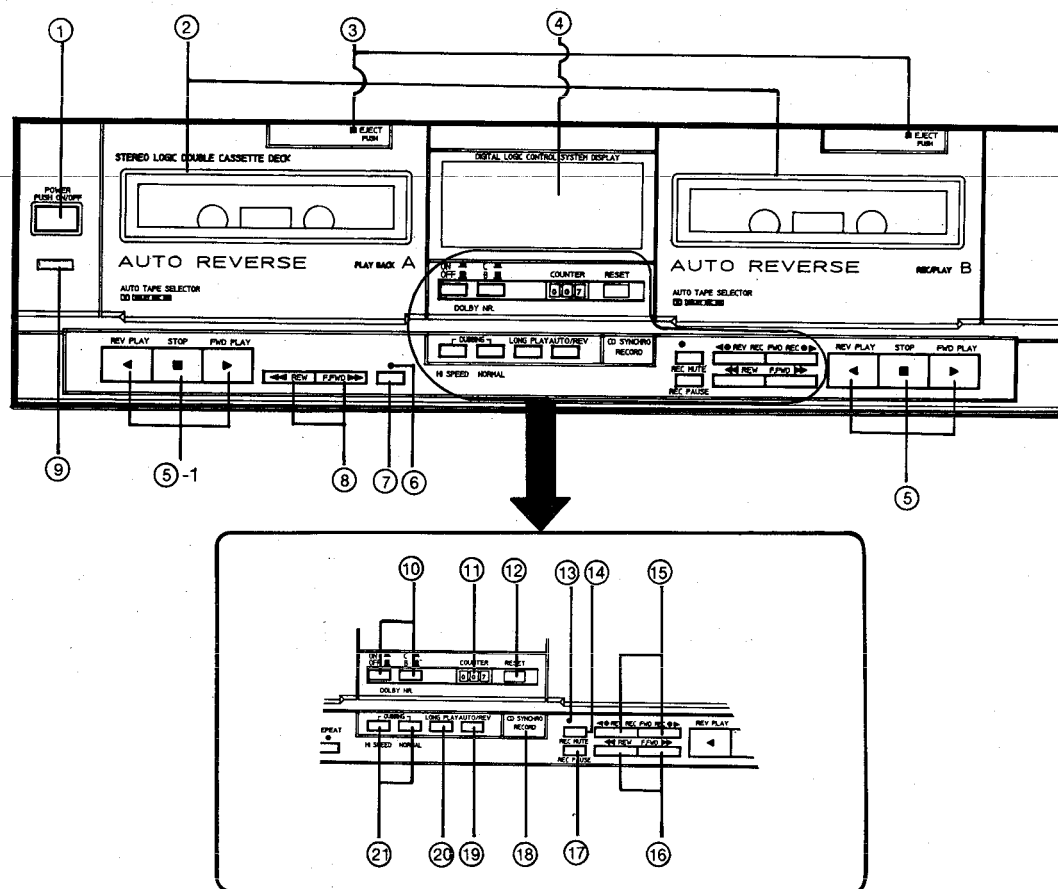
# 2. SERVICING NOTE

THERE ARE MANY PARTS IN THE UNIT WHICH HAVE SPECIAL SAFETY FEATURES. WHEN REPLACING PARTS, USE PARTS IN THE CIRCUIT DIAGRAM AND PARTS LIST. IF REPLACEMENT IS REQUIRED, USE ONLY IDENTICAL PARTS WHICH HAVE SAME SAFETY FEATURES AS IN THE SERVICE MANUAL. IF PROPER PARTS ARE NOT USED, IT MIGHT RESULT IN SHOCK, FIRE OR OTHER HAZARD.

\* UNPLUG POWER CORD FROM THE AMPLIFIER WHEN CONNECTING DC POWER JACK TO AMPLIFIER. CHECK THE FUSIBLE REGISTER IN THE AMPLIFIER POWER SECTION IF THERE IS A SHORT IN THE PCB WHEN SERVICING OR CONNECTING UNIT.

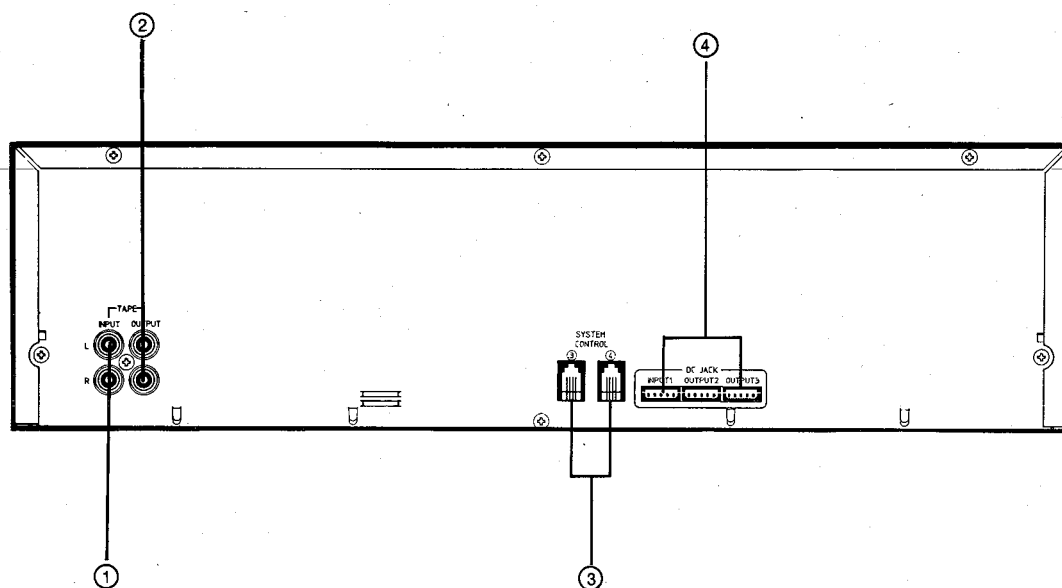
## 3. LOCATION AND FUNCTION

### 3-1. FRONT



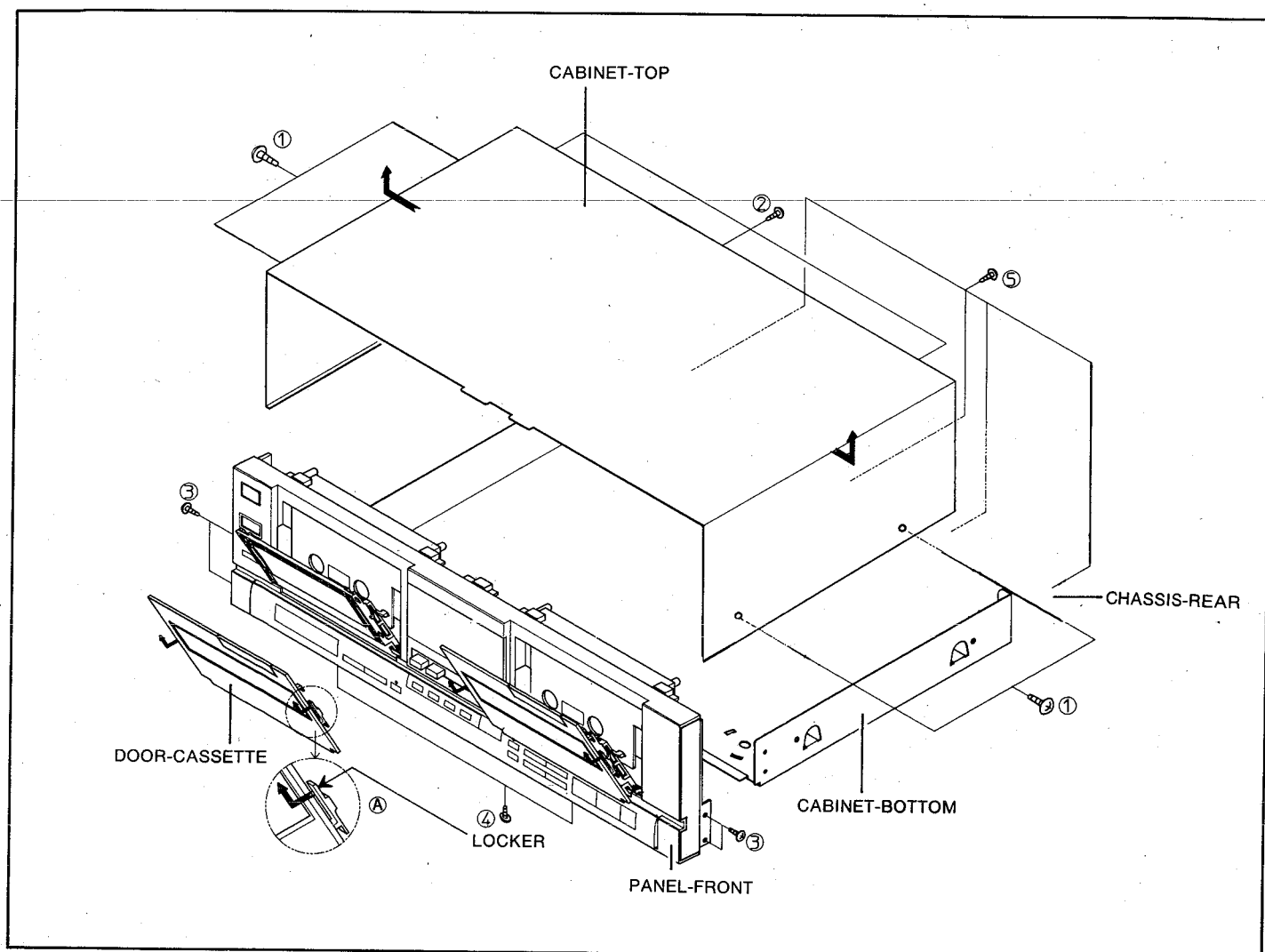
1. POWER button.  
Press to turn the power on. You can turn the unit off by pressing the ON/OFF button again.
2. Cassette deck door.
3. EJECT button.  
Press to open and press again to close.
  - When the power goes off or when the power is turned off during play, you cannot eject the cassette tape until the power is recovered.
4. Display  
Operation status of deck A or B is displayed here.
5. 5-1. FORWARD PLAY (▶) button/REVERSE PLAY (◀) button/STOP (□) button.
6. 1 MUSIC REPEAT display lamp.
7. 1 MUSIC REPEAT selector button.
8. "Deck A" FAST FORWARD (⏭) button/REWIND (⏮) button.
9. Timer stand-by switch (OPTION).: The series which include the external timer doesn't have this switch.
10. Dolby selector switch (select Dolby on/off and Dolby B/C).
11. TAPE COUNTER
12. COUNTER RESET SWITCH  
Push this switch to set the counter to "000".
13. Record mute lamp.
14. Record mute (REC MUTE) button.
15. Record button.
16. "DECK B" fast forward (⏭) button/rewind (⏮) button.
17. Record pause (REC PAUSE).
18. CD SYNCHRO RECORD button.
19. Auto reverse button.
20. LONG PLAY button.
21. DUBBING button.

### 3-2. REAR



1. TAPE INPUT
2. TAPE OUTPUT
3. SYSTEM CONTROL JACK
4. DC POWER JACK

## 4. DISASSEMBLY



### 1) DISASSEMBLY OF THE CABINET-TOP

REMOVE 4 SCREWS ( ① ). REMOVE 3 SCREWS ( ② ) AND SPRING BOTH SIDES (OF THE CABINET-TOP) OUT AND PULL UP IN THE DIRECTION OF ARROW.

### 2) DISASSEMBLY OF THE CABINET BOTTOM

REMOVE 4 SCREWS ( ③ ). REMOVE 2 SCREWS HOLDING ON THE CABINET FRONT AND PULL THE CABINET BOTTOM BACK TOWARDS YOU.

### 3) DISASSEMBLY OF THE CHASSIS-REAR

REMOVE 6 SCREWS ( ⑤ ) FROM THE CHASSIS-REAR.

### 4) DISASSEMBLY OF THE DOOR CASSETTE

PULL THE LOCKER ( A ) AT BOTH ENDS (OF DOOR CASSETTE) TOWARDS YOU THEN PULL UP.

# 5. OPERATING INSTRUCTION

MICOM (LC66508-4296)

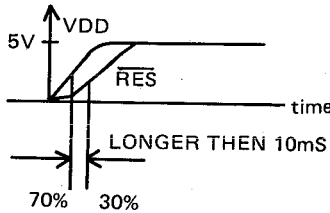
PIN NO	PIN NAME	IN i	OUT ○	OPERATION	ACTIVE	
					H	L
1	REC		○	REC, DUBBING : L		REC, DUBBING
2	DUB		○	DUBBING : H	○	
3	H/SP		○	HI-SPEED DUBBING : L	NOR SPEED	HI SPEED
4	A PLAY		○	A DECK PLAY : H	○	
5	CLK	i	○	REMOTE CONTROL OPERATION PORT		
6	DATA	i	○	REMOTE CONTROL OPERATION PORT		
7	CE	i	○	REMOTE CONTROL OPERATION PORT		
8	POWER OFF	i		POWER ON : H, POWER OFF : L	POWER ON	POWER OFF
9-11	T, SENS			A DECK OPERATION INPUT PORT		A DECK OPERATION
	FF/REW PLAY	i				B DECK OPERATION
12-16	F, REC/R REC			B DECK OPERATION INPUT PORT		
	T.SENS FF/REW. PLAY	i				
17-18	TSP, TSR (OPTION)	i		TIMER SW PLAY : B DECK PLAY TIMER SW REC : B DECK REC	PLAY REC	
19	REC MUTE		○	REC-MUTE SIGNAL OUTPUT	REC MUTE ON	REC MUTE OFF
20	LINE MUTE		○	LINE-MUTE SIGNAL OUTPUT	LINE MUTE ON	LINE MUTE OFF
21	REPEAT		○	1 MUSIC REPEAT INDICATOR OPERATION OUTPUT		
22	REC MUTE		○	REC MUTE INDICATOR OPERATION OUTPUT		
23-24	NOR/SPEED(OPTION)		○	NOR/SPEED INDICATOR OPERATION OUTPUT		LED OPTION
	HI/SPEED (OPTION)		○	HI/SPEED INDICATOR OPERATION OUTPUT		
25	P1Ao		○	A DECK PLAYBACK PLUNGER OPERATION PORT	PLAY REC	
26	P2Ao		○	A DECK FF/REW PLUNGER OPERATION PORT	FF/REW	
27	P1Bo		○	B DECK PLAYBACK PLUNGER OPERATION PORT	PLAY REC	
28	P2Bo		○	B CDEK FF/REW PLUNGER OPERATION PORT	FF/REW	
29	INH	i	○	LCD CONTROL PORT		
30-31	TEST, VSS			GND PORT		
32-33	OSC1, OSC2			4MHz OSC PORT		
34	RES			RESET		
35-37	CE, CLK, DATA			LCD CONTROL		
38-45	REW, FF, R PLAY, F PLAY(B DECK)		○	B DECK OPERATION DISPLAY : OUTPUT PORT (OPTION)		
	REW, FF, R PLAY, F PLAY (A DECK)			A DECK OPERATION DISPLAY : OUTPUT PORT (OPTION)		

**MICOM (LC66508-4293)**

PIN NO	PIN NAME	IN	OUT	OPERATION	ACTIVE	
		<i>i</i>	<input type="radio"/>		H	L
46-54, 56	KEY MATRIX	<i>i</i>		KEY MATRIX INPUT		
55	AMPS IN	<i>i</i>		AMPS BLANK SIGNAL INPUT	H	
57	QUICK REVERSE B	<i>i</i>		B DECK LEADER SIGNAL INPUT		
58	QUICK REVERSE A	<i>i</i>		A DECK LEADER SIGNAL INPUT		
59	AUTO STOP B	<i>i</i>		B DECK AUTOSTOP SIGNAL INPUT		
60	AUTO STOP A	<i>i</i>		A DECK AUTOSTOP SIGNAL INPUT		
61	MAO		<input type="radio"/>	A DECK MOTOR OPERATION SIGNAL OUTPUT	MOTOR OPERATION MOTOR OPERATION	
62	MBO		<input type="radio"/>	B DECK MOTOR OPERATION SIGNAL OUTPUT		
63	AMPS OUT		<input type="radio"/>	AMPS OPERATION SIGNAL OUTPUT		
64	VDD			VDD		

## 6. TROUBLE SHOOTING

BLOCK	MAIN FUNCTION	CHECK POINT												
TAPE EQ AMP JIC1 (LA3246)	<ul style="list-style-type: none"><li>● CONVERT SIGNAL OF P/B AND R/P DECK</li></ul>	<ul style="list-style-type: none"><li>● CHECK PIN NO 9 P/B DECK : L R/P DECK : H</li><li>● CHECK JQ4. P/B DECK : TURN ON R/P DECK : TURN OFF</li></ul>												
AMPS JIC2 (LA2010)	<ul style="list-style-type: none"><li>● DETECT AMPS AND ONE MUSIC REPEAT OPERATION</li></ul>	<ul style="list-style-type: none"><li>● CHECK PIN NO 6 INTERLUDE : L MUSIC : H</li><li>● CHECK IF SIGNAL IS INPUT TO PIN NO 1</li><li>● CHECK UQ1 DURING AMPS OPERATION</li></ul>												
DOLBY NR AMP DIC1 (CX20187)	<ul style="list-style-type: none"><li>● CONVERT SIGNAL OF P/B AND SOURCE</li></ul>	<ul style="list-style-type: none"><li>● CHECK PIN NO 42 P/B : H R/P : L DUBBING : H</li><li>● WHILE MALFUNCTIONING DQ1, DQ2 BASE CHECK</li></ul> <table><tr><th>FUNCTION</th><th>DQ 1</th><th>DQ 2</th></tr><tr><td>P/B</td><td>TURN-OFF</td><td>TURN-OFF</td></tr><tr><td>R/P</td><td>TURN-ON</td><td>TURN-OFF</td></tr><tr><td>DUBBING</td><td>TURN-ON</td><td>TURN-ON</td></tr></table>	FUNCTION	DQ 1	DQ 2	P/B	TURN-OFF	TURN-OFF	R/P	TURN-ON	TURN-OFF	DUBBING	TURN-ON	TURN-ON
FUNCTION	DQ 1	DQ 2												
P/B	TURN-OFF	TURN-OFF												
R/P	TURN-ON	TURN-OFF												
DUBBING	TURN-ON	TURN-ON												
	<ul style="list-style-type: none"><li>● OPERATE DOLBY NR AND CONVERTS TO B/C</li></ul>	<ul style="list-style-type: none"><li>● PIN NO 1, 2 CHECK</li></ul> <table><tr><th>NR</th><th>Pin 1</th><th>Pin 2</th></tr><tr><td>OFF</td><td>H</td><td>H</td></tr><tr><td>B</td><td>L</td><td>H</td></tr><tr><td>C</td><td>L</td><td>L</td></tr></table>	NR	Pin 1	Pin 2	OFF	H	H	B	L	H	C	L	L
NR	Pin 1	Pin 2												
OFF	H	H												
B	L	H												
C	L	L												

BLOCK	MAIN FUNCTION	CHECK POINT								
LINE INPUT AMP KIC3 (BA3312)	<ul style="list-style-type: none"><li>● OPERATE ALC (CONTROLS RECORDING LEVEL AUTOMATICALLY IF INPUT IS EXCESSIVE)</li></ul>	<ul style="list-style-type: none"><li>● CHECK PIN NO 4 ALC : 0.8 ~1.1V</li></ul>								
R/P SWITCHING	<ul style="list-style-type: none"><li>● CONVERT PLAY/REC HEAD OF B DECK</li></ul>	<ul style="list-style-type: none"><li>● LQ1L, LQ1R, LQ2L, LQ2R LQ4L, LQ4R, BASE CHECK</li></ul> <table><tr><td>FUNCTION</td><td>LQ1L, R</td><td>LQ2L, R</td><td>LQ4L, R</td></tr><tr><td>REC PLAY</td><td>TURN-off TURN-on</td><td>TURN-off TURN-on</td><td>TURN-on TURN-off</td></tr></table>	FUNCTION	LQ1L, R	LQ2L, R	LQ4L, R	REC PLAY	TURN-off TURN-on	TURN-off TURN-on	TURN-on TURN-off
FUNCTION	LQ1L, R	LQ2L, R	LQ4L, R							
REC PLAY	TURN-off TURN-on	TURN-off TURN-on	TURN-on TURN-off							
μ-COM UIC1 (LC66508-4296)	<ul style="list-style-type: none"><li>● DECK MECHA CONTROL</li><li>● LCD DISPLAY CONTROL</li><li>● MUTE CONTROL</li><li>● CONTROL EACH CIRCUIT</li></ul>	<ul style="list-style-type: none"><li>● CHECK RESET WHEN POWER IS ON</li></ul> 								
LCD DISPLAY UIC2 (LC7582)	<ul style="list-style-type: none"><li>● OPERATE LCD DISPLAY</li></ul>	<ul style="list-style-type: none"><li>● CHECK PIN NO 57 WHEN LCD OPERATES : H</li></ul>								
BIAS OSC	<ul style="list-style-type: none"><li>● OSCILLATE RECORDING BIAS</li></ul>	<ul style="list-style-type: none"><li>● CHECK TP3, TP4 OSC FREQ : 105KHz</li><li>● CHECK LQ6 AND LQ5.</li></ul> <table><tr><td>FUNCTION</td><td>LQ6</td><td>LQ5</td></tr><tr><td>REC DUBBING</td><td>TURN-ON TURN-ON</td><td>TURN-ON TURN-ON</td></tr></table>	FUNCTION	LQ6	LQ5	REC DUBBING	TURN-ON TURN-ON	TURN-ON TURN-ON		
FUNCTION	LQ6	LQ5								
REC DUBBING	TURN-ON TURN-ON	TURN-ON TURN-ON								

# 7. TROUBLE SHOOTING PROCEDURE

## 1) DECK PROBLEM

CHECK POWER
<ul style="list-style-type: none"> <li>CHECK VOLTAGE JACK</li> <li>CHECK THE VOLTAGE OF RIC1, RIC2</li> </ul>
IN : 23V
OUT : 12V



$\mu$ - COM RESET CHECK (UIC1)



$\mu$ - COM KEY MATRIX CHECK
<ul style="list-style-type: none"> <li>P/B DECK KEY (PLAY, STOP FF, REW)</li> </ul>
<ul style="list-style-type: none"> <li>R/P DECK KEY (PLAY, STOP, FF, REW)</li> </ul>



MOTOR OPERATION CHECK		
FUNCTION	CQ8	CQ10
OPETATE P/B DECK	Turn-on	
OPERATE R/P DECK		Turn-on



DECK CONNECTOR WIRE CHECK
<ul style="list-style-type: none"> <li>P/B DECK 9 PIN WIRE AND R/P DECK 12 PIN WIRE CHECK</li> </ul>

## 2) HIGH-SPEED DUBBING PROBLEM

$\mu$ - COM AND TR CHECK			
STEP	FUNCTION LOCATION	Hi/DUb	NOR/DUb
1	$\mu$ -COM PIN3	L	H
2	UQ2	Turn off	Turn on
3	CQ12, 13	Turn off	Turn on

## 3) RECORDING PROBLEM

$\mu$ - COM AND TR CHECK		
STEP	FUNCTION LOCATION	REC
1	$\mu$ -COM PIN1	L
2	UQ3	Turn-on
3	DQ1	Turn-on
4	DIC1 PIN 42	L
5	LQ7	Turn-on
6	LQ8	Turn-on
7	LQ4L 4R	Turn-on
8	LQ6	Turn-on
9	LQ5	Turn-on

## 4) DUBBING PROBLEM

$\mu$ - COM AND TR CHECK		
STEP	FUNCTION LOCATION	DUBBING
1	$\mu$ -COM PIN2	H
2	DQ2	Turn on
3	DIC1 PIN42	H
4	JQ4	Turn on
5	JQ2L, 2R	Turn on
6	JIC1 PIN9	L

# 8. ALIGNMENT INSTRUCTION

## 1. TAPE SPEED ADJUSTMENT

### NOTE

- 1) MEASURING TAPE i) MTT-111 (OR EQUIVALENT) TAPE (THAT 3KHz SIGNAL IS RECORDED)  
ii) MTT-5521 (OR EQUIVALENT)
- 2) CONNECT MEASURING EQUIPMENTS AS FIGURE 1.

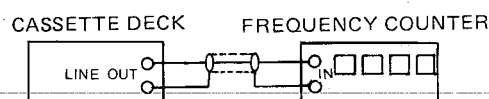


FIG. 1

	ITEM	CONNECTION	PREPARATION	ADJUSTMENT	NORMAL SETTING	REMARK
1	NOR SPEED	CONNECT LINE OUT TO THE FREQUENCY COUNTER	1) A-DECK MTT-111 ii) PRESS PLAY SWITCH iii) B-DECK SAME	i) TURN CSR1 RIGHT & LEFT ii) TURN CSR3 LEFT & RIGHT	3KHz $\pm$ 1% 3KHz $\pm$ 1%	
2	HI SPEED	SAME AS 1	i) A-DECK : MTT-111 ii) B-DECK : MTT-5521 iii) PRESS HIGH SPEED DUBBING SWITCH	i) TURN CSR2 LEFT & RIGHT ii) FOR DECK B, INSERT MTT-111 IN THE DECK B AND ADJUST CSR4 (SHORT HI/SPEED PORT)	6KHz $\pm$ 1%	

## 2. PLAY LEVEL ADJUSTMENT

### NOTE

- 1) BEFORE ADJUSTMENT, CLEAN R/P HEAD
- 2) MEASURING TAPE i) MTT-114NA (OR EQUIVALENT) 12.5KHz FOR AZIMUTH ADJUSTMENT  
ii) MTT-150 (OR EQUIVALENT) TAPE RECORDED BY DOLBY LEVEL 200mwb/m)
- 3) DOLBY NR SW OFF
- 4) CONNECT MEASURING EQUIPMENTS AS FIG. 2.

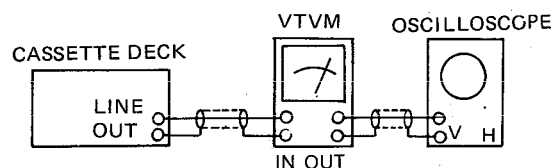


FIG. 2

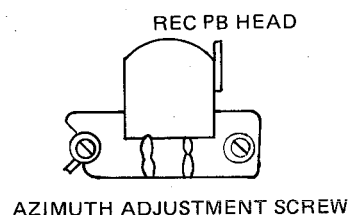


FIG. 3

## 1) PLAYBACK LEVEL ADJUSTMENT (DECK A)

STEP	ITEM	CONNECTION	PREPARATION	ADJUSTMENT	STANDARD	REMARK
1	AZIMUTH	CONNECT LINE OUTPUT TO VTVM AND SCOPE	INSERT MTT-114 IN THE DECK A 1) PRESS FWD PLAY BUTTON 2) PRESS REV PLAY BUTTON.	1) ADJUST ADJUSTMENT SCREW AS IN THE FIG. 3 2) ADJUST ADJUSTMENT SCREW ON THE RIGHT DURING REV PLAY	MAX OUTPUT AND SAME PHASE OF BOTH CHANNEL	AFTER ADJUSTMENT, LOCK THE SCREW WITH REGIN LOCK
2	PLAYBACK OUTPUT LEVEL	CONNECT LINE OUTPUT TO VTVM AND SCOPE	PLAY MTT-150 IN THE DECK A	L-CH : JSR2L R-CH : ADJUST JSR2R	510mV $\pm$ 1dB	REFER TO ALIGNMENT LOCATION

## 2) PLAYBACK LEVEL ADJUSTMENT (DECK B)

STEP	ITEM	CONNECTION	PREPARATION	ADJUSTMENT	STANDARD	REMRAK
1	AZIMUTH	CONNECT LINE OUTPUT TO VTVM AND SCOPE	INSERT MTT-114 IN THE DECK B 1) PRESS FWD PLAY BUTTON 2) PRESS REV PLAY BUTTON	1) ADJUST ADJUSTMENT SCREW AS IN THE FIG. 3 2) ADJUST ADJUSTMENT SCREW ON THE RIGHT DURING REV PLAY	MAX OUTPUT AND SAME PHASE OF BOTH CHANNEL	AFTER ADJUSTMENT, LOCK THE SCREW WITH REGIN LOCK
2	PLAYBACK OUTPUT LEVEL	CONNECT LINE OUTPUT TO VTVM AND SCOPE	PLAY MTT-150 IN THE DECK B	L-CH : JSR1L R-CH : JSR1R ADJUST JSR1R	510mV $\pm$ 1dB	REFER TO ALIGNMENT LOCATION

### 3. RECORDING & PLAYBACK ADJUSTMENT

#### NOTE

- 1) CONNECT MEASURING INSTRUMENTS AS IN THE FIG 4.
- 2) SET DOLBY NR SWITCH TO OFF.
- 3) CONNECT TP4 TO TP5 WHEN ADJUSTING RECORDING CURRENT.
- 4) MEASURING TAPE
  - i) MTT-5521 (FOR NORMAR RECORDING)
  - ii) MTT-5561 (FOR CRO2 RECORDING)
  - iii) MTT-5571 (FOR METAL RECORDING)

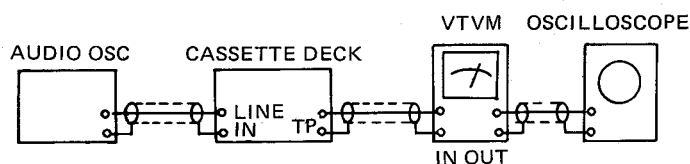
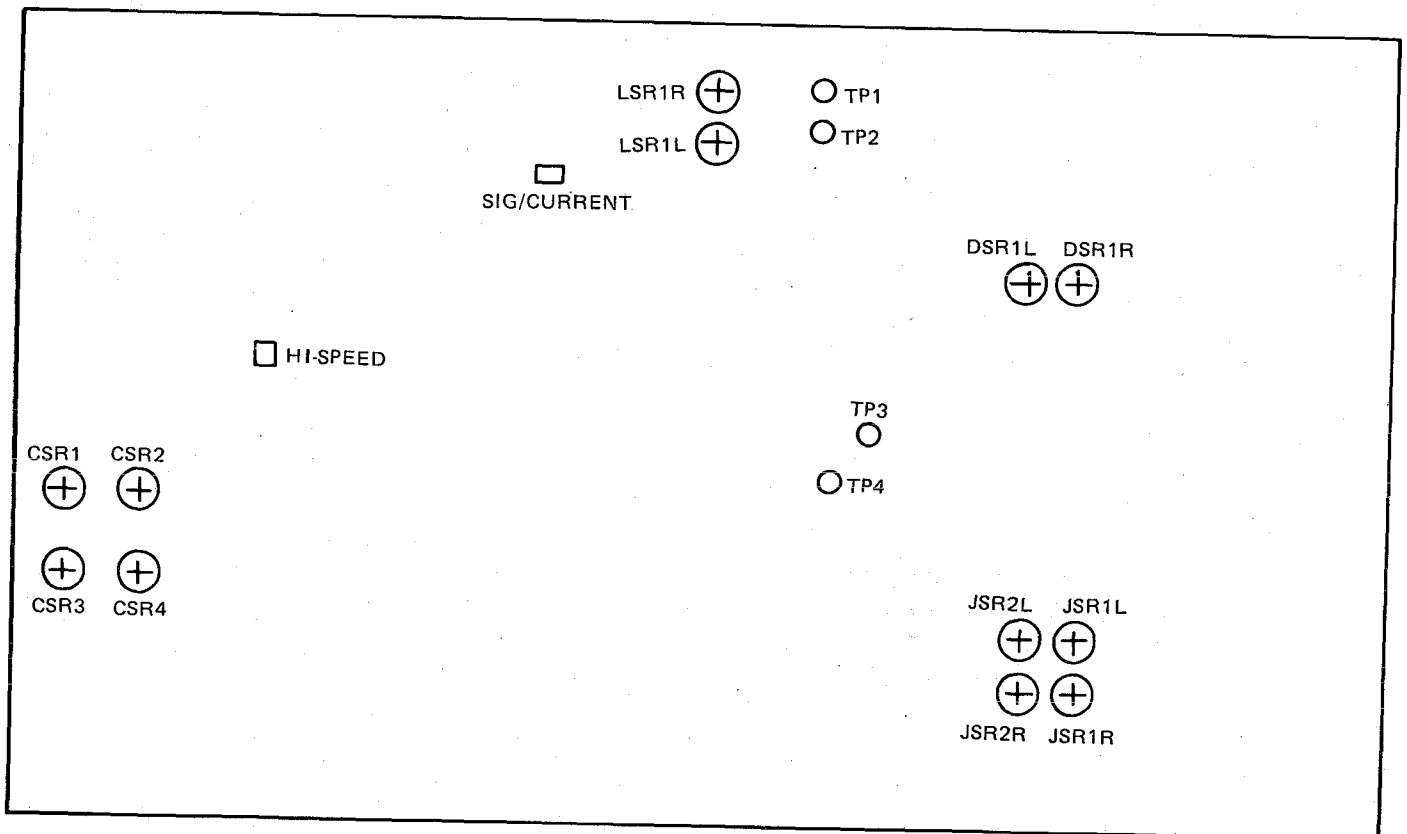


FIG. 4

STEP	ITEM	INPUT SIGNAL	CONNECTION	PREPARATION	ADJUSTMENT	NORMAL SETTING	REMARK
1	RECORDING CURRENT (NORMAL)	1. SUPPLY 400Hz 400mV TO LINE IN BY AUDIO OSC	<ul style="list-style-type: none"> <li>• VTVM TO TP3(L-CH) AND GND</li> <li>• VTVM TO TP4(R-CH) AND GND</li> </ul>	<ul style="list-style-type: none"> <li>• INSERT MTT-5521 IN DECK B AND PRESS REC SWITCH</li> </ul>	<ul style="list-style-type: none"> <li>• TURN DSR1L (L-CH) AND DSR1R(R-CH) LEFT AND RIGHT</li> </ul>	<ul style="list-style-type: none"> <li>• VTVM 0.7mV <math>\pm</math> 5%</li> </ul>	<ul style="list-style-type: none"> <li>• REFER TO ADJUSTMENT LOCATION</li> </ul>
2	BIAS OSC FREQ.	2. SUPPLY 400Hz 400mV TO LINE IN BY AUDIO OSC	<ul style="list-style-type: none"> <li>• FREQUENCY COUNTER TO TO 3 AND GND</li> </ul>	<ul style="list-style-type: none"> <li>• INSERT MTT-5521 IN DECK B AND PRESS REC SWITCH</li> </ul>	<ul style="list-style-type: none"> <li>• TURN BIAS OSC FREQ COIL LEFT AND RIGHT</li> </ul>	105KHz	<ul style="list-style-type: none"> <li>• REFER TO ADJUSTMENT LOCATION</li> </ul>
3	TRAP COIL	3. SUPPLY 400Hz 400mV TO LINE IN BY AUDIO OSC	<ul style="list-style-type: none"> <li>• VTVM TO TP4(L-CH) AND GND</li> <li>• VTVM TO TP3 (R-CH) AND GND</li> </ul>	<ul style="list-style-type: none"> <li>• INSERT MTT-5521 IN DECK B AND PRESS REC SWITCH</li> </ul>	<ul style="list-style-type: none"> <li>• TURN KLP1L (L-CH) AND KLP1R(R-CH) LEFT AND RIGHT</li> </ul>	• MINIMUM	<ul style="list-style-type: none"> <li>• REFER TO ADJUSTMENT LOCATION</li> </ul>
	BIAS CURRENT	4. SUPPLY 400Hz 400mV TO LINE IN BY AUDIO OSC	<ul style="list-style-type: none"> <li>• VTVM TO TP3(L-CH) AND GND</li> <li>• VTVM TO TP4(R-CH) AND GND</li> </ul>	<ul style="list-style-type: none"> <li>• INSERT MTT-5521 IN DECK B AND PRESS REC SWITCH</li> </ul>	<ul style="list-style-type: none"> <li>• TURN LSR1L (L-CH) AND LSR1R(R-CH) LEFT AND RIGHT</li> </ul>	<ul style="list-style-type: none"> <li>• 54mV <math>\pm</math> 5%</li> </ul>	<ul style="list-style-type: none"> <li>• REFER TO ADJUSTMENT LOCATION</li> </ul>

## 9. ALIGNMENT POINT LOCATION



CSR1 DECK-A NOR SPEED

CSR2 DECK-A HI SPEED (HI SPEED PORT SHORT)

CSR3 DECK-B NOR SPEED

CSR4 DECK-B HI SPEED (HI SPEED PORT SHORT)

JSR1L DECK-B L-CH OUTPUT LEVEL

JSR1R DECK-B R-CH OUTPUT LEVEL

JSR2L DECK-A L-CH OUTPUT LEVEL

JSR2R DECK-A R-CH OUTPUT LEVEL

DSR1L REC L-CH SIGNAL CURRENT (SIG/CURRENT PORT SHORT)-TP3

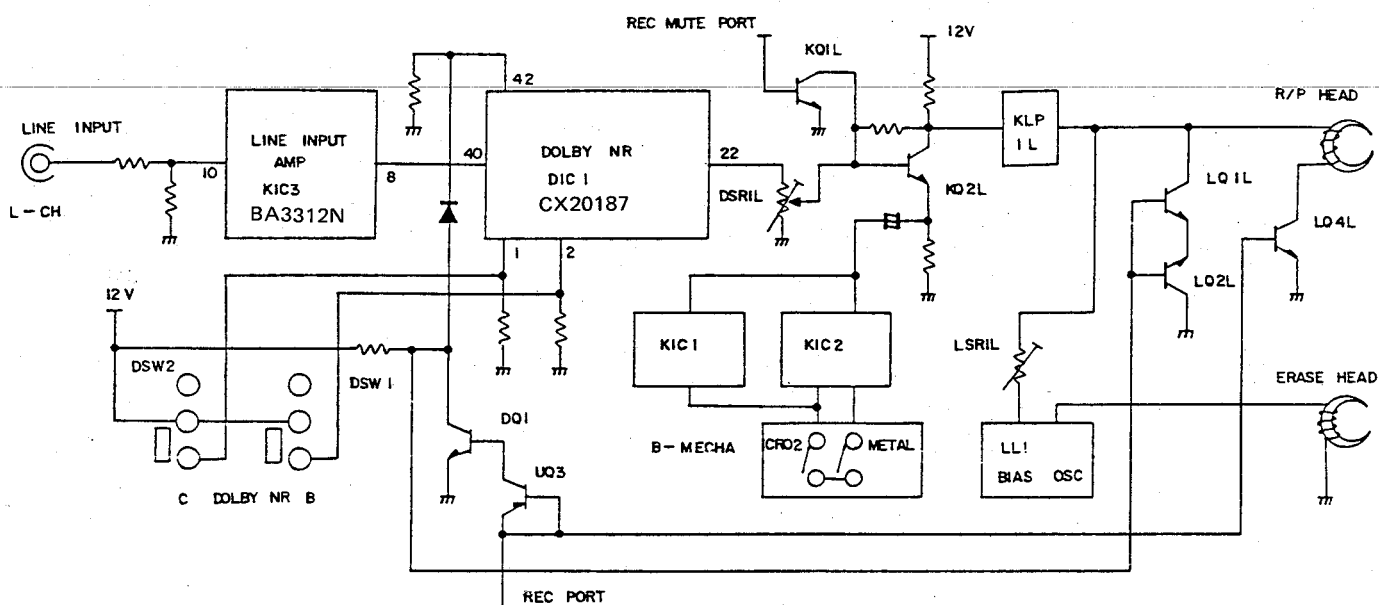
DSR1R REC R-CH SIGNAL CURRENT (SIG/CURRENT PORT SHORT)-TP4

LSR1L REC L-CH BIAS CURRENT-TP3

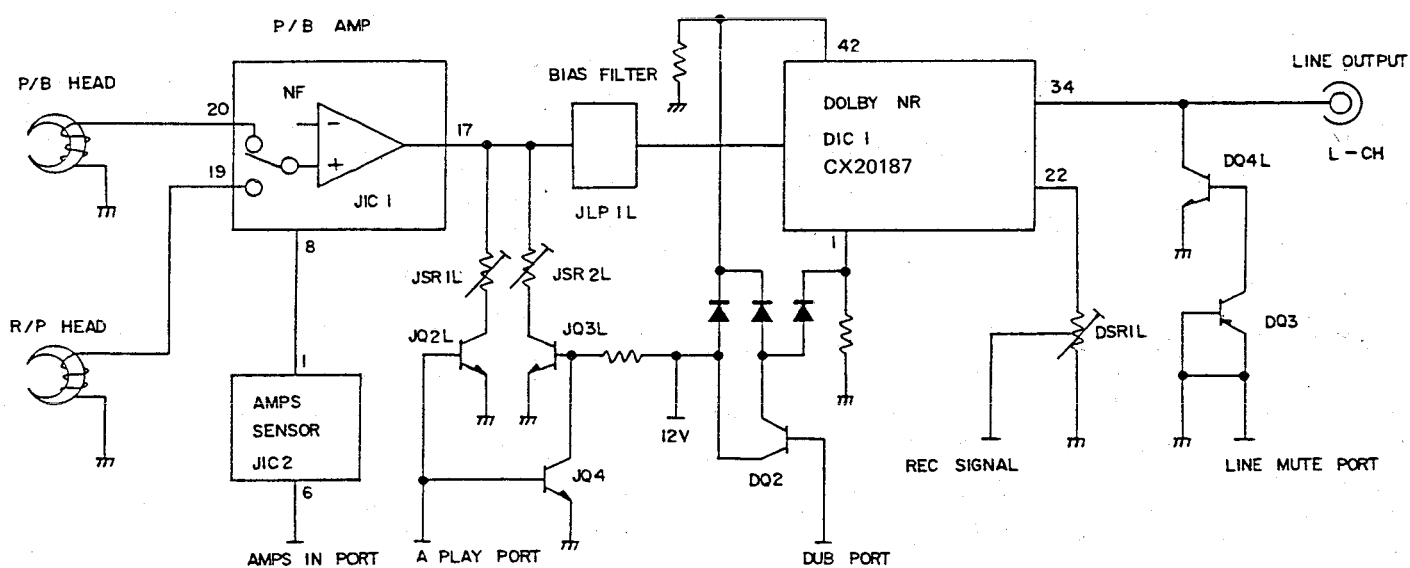
LSR1R REC R-CH BIAS CURRENT-TP4

## 10. BLOCK DIAGRAM

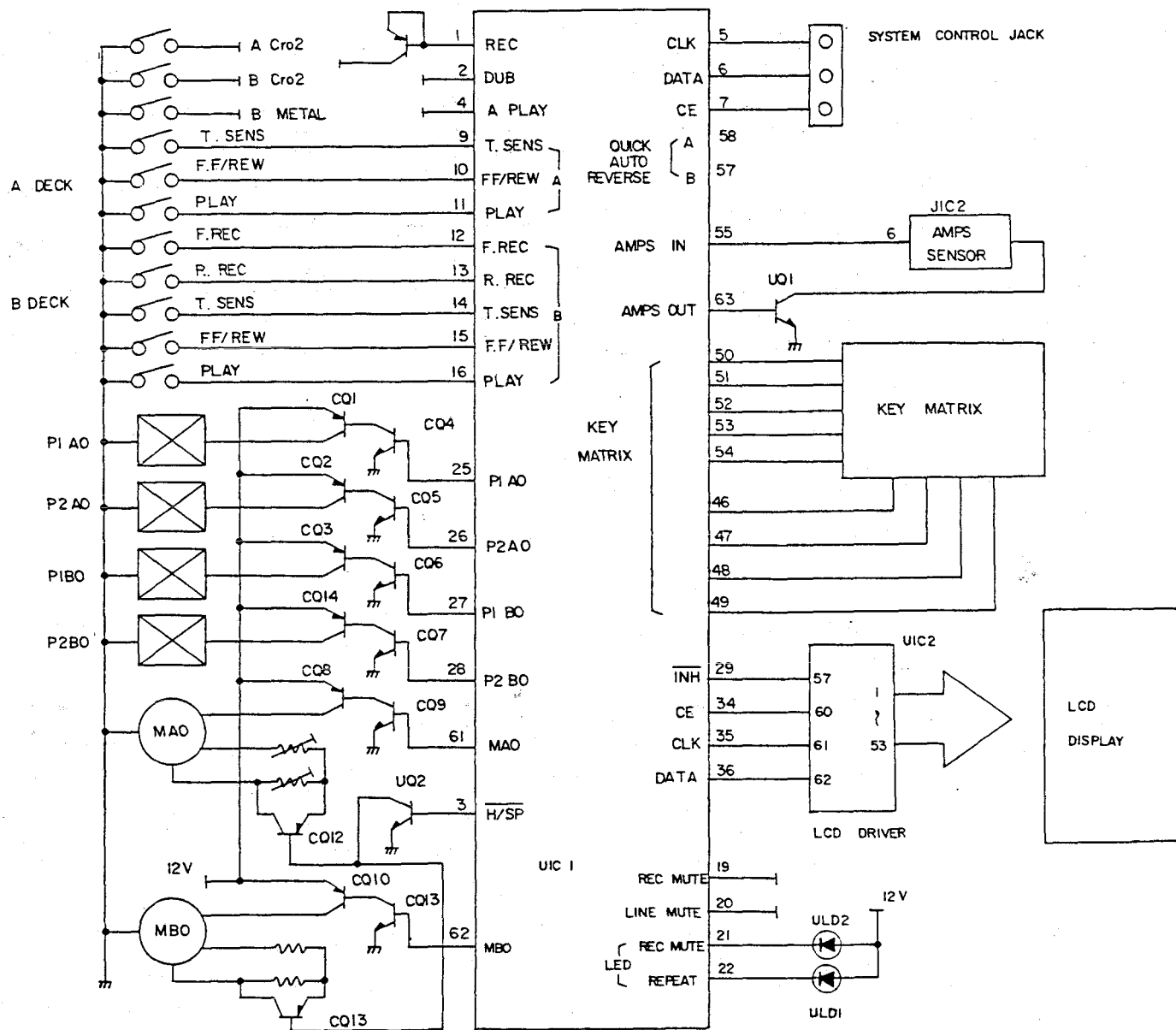
## 10-1. RECORD SECTION



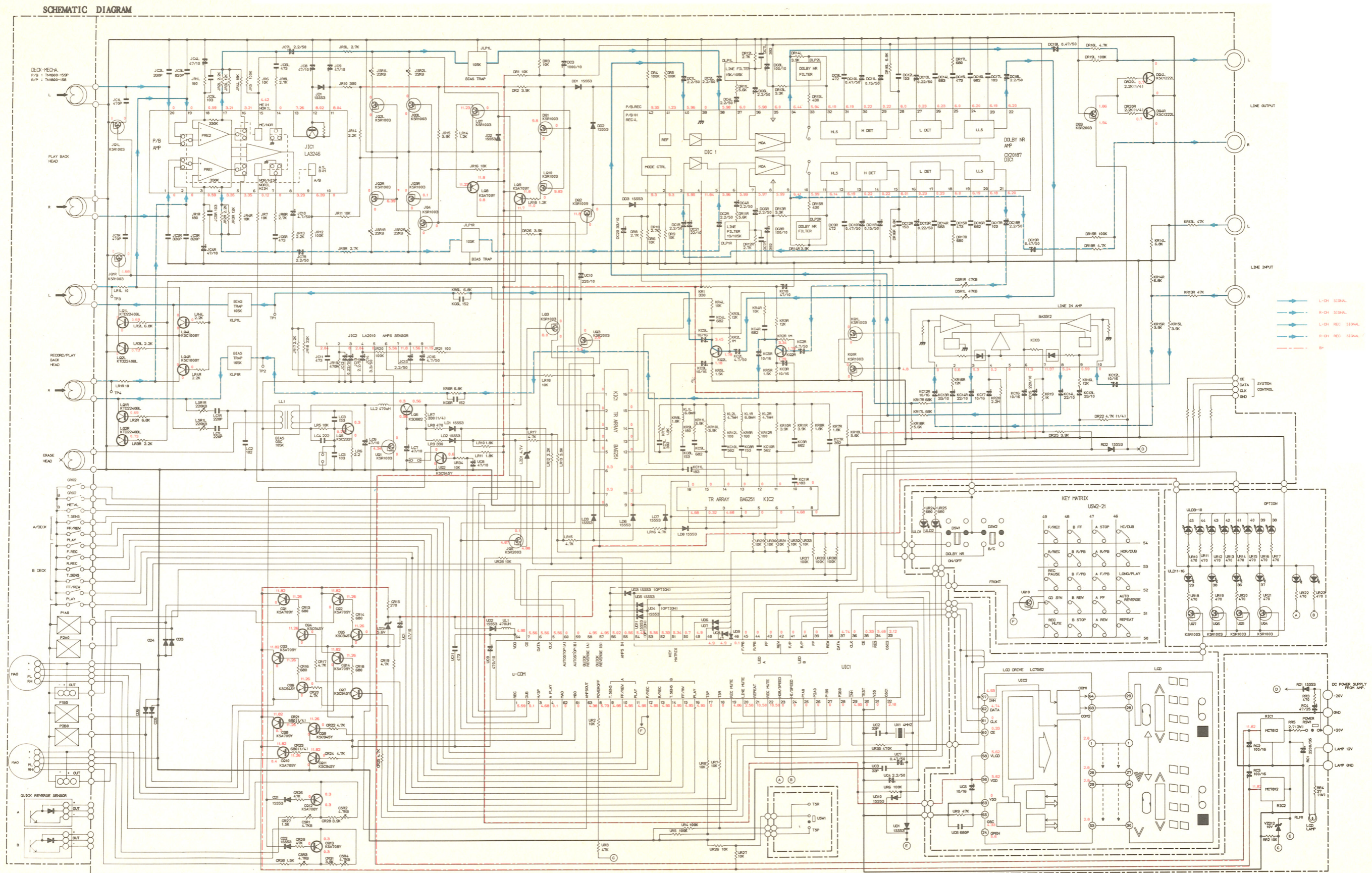
## 10-2. PLAY/DUBBING SECTION



# 10-3. LOGIC CONTROL SECTION



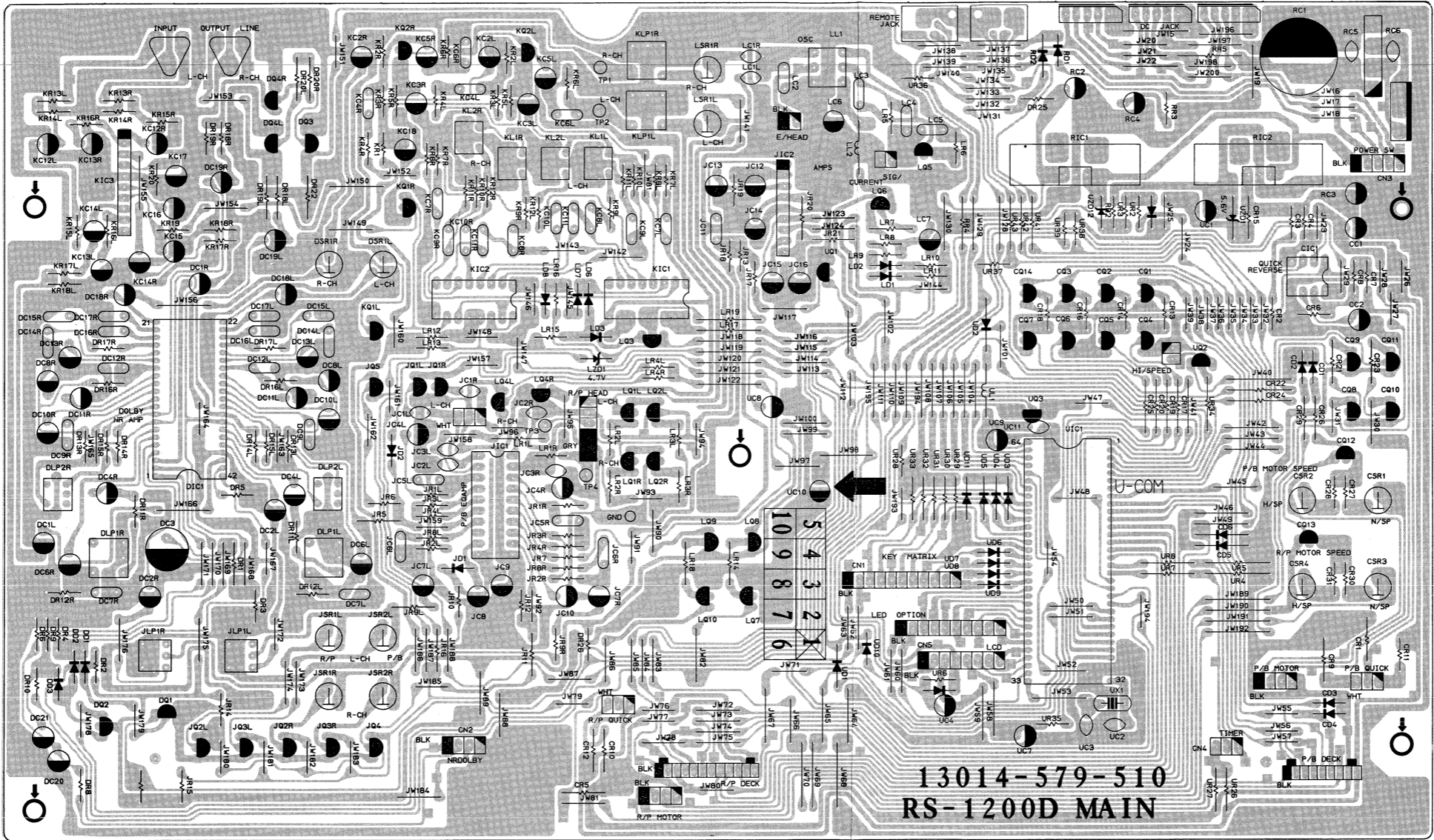
# 11. SCHEMATIC DIAGRAM



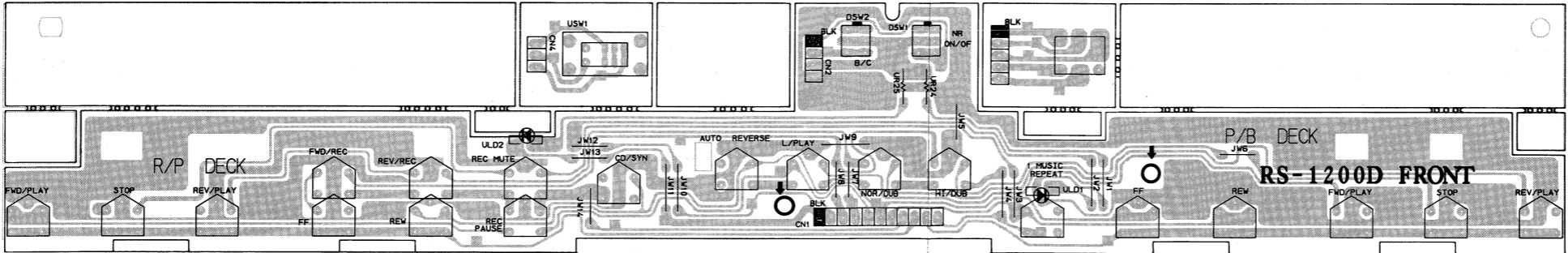
1. The unit of ALL Resistor is  $\Omega$  ( $K = K \Omega$ ,  $M = M \Omega$ ).  
ALL Resistors are 1/4W or 1/8W unless otherwise stated.
2. The unit of all CONDENSER is  $\mu F$   $P = PF$ .
3. The specification Described in the circuit change for quality improvement.

12. CIRCUIT BOARD DIAGRAM(PATTERN SIDE)

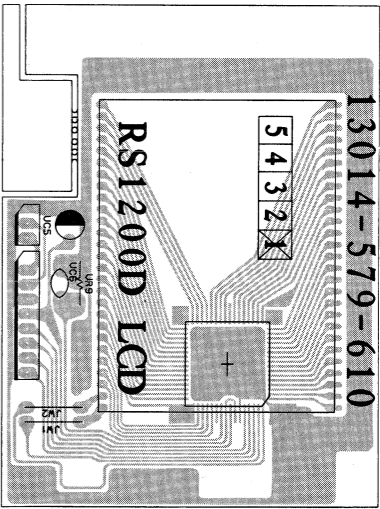
MAIN PCB



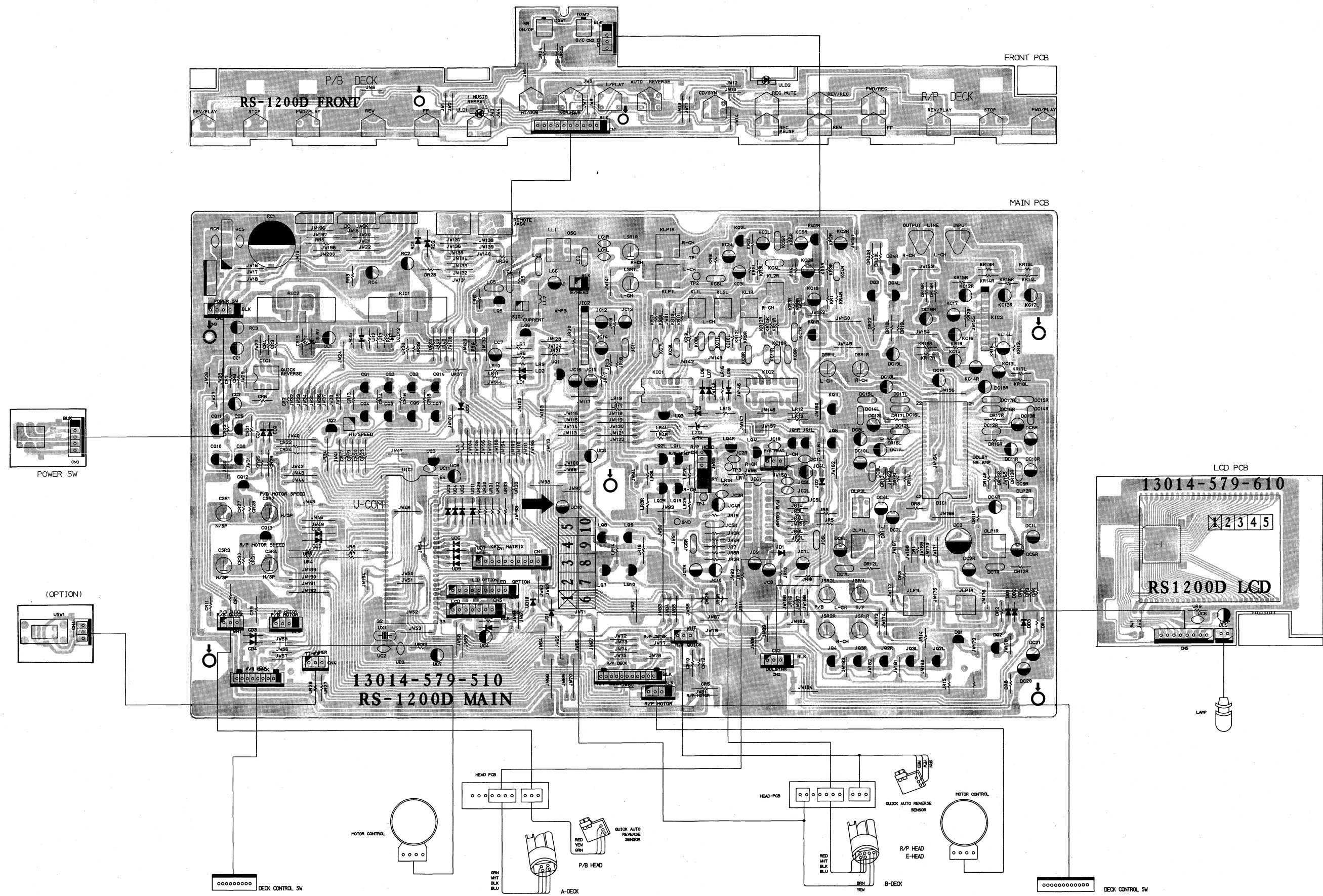
FRONT PCB



LCD PCB

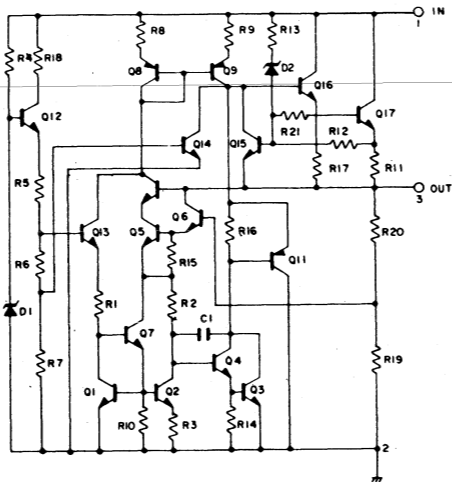
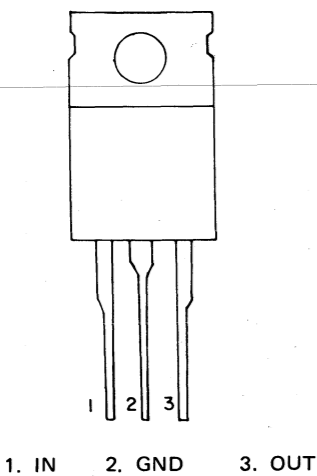


13. WIRING DIAGRAM

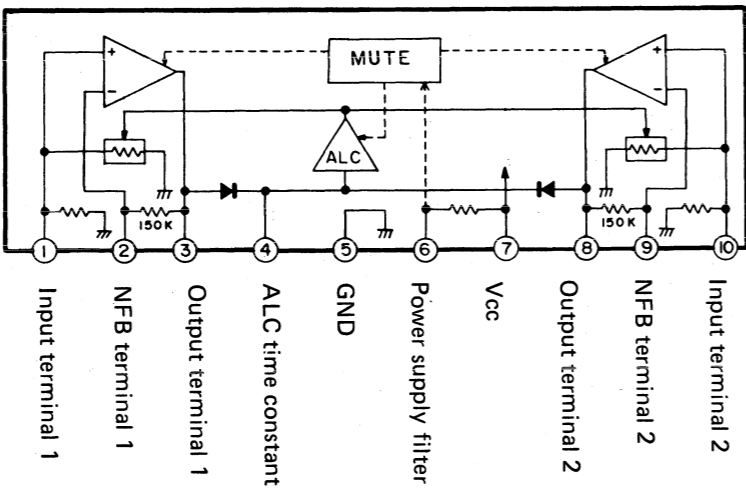


14. TR AND IC LEAD LAYOUT

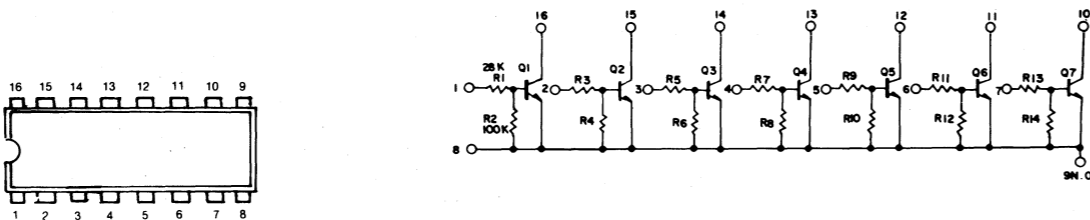
1. MC7812L (RIC1, RIC2) REGULATOR



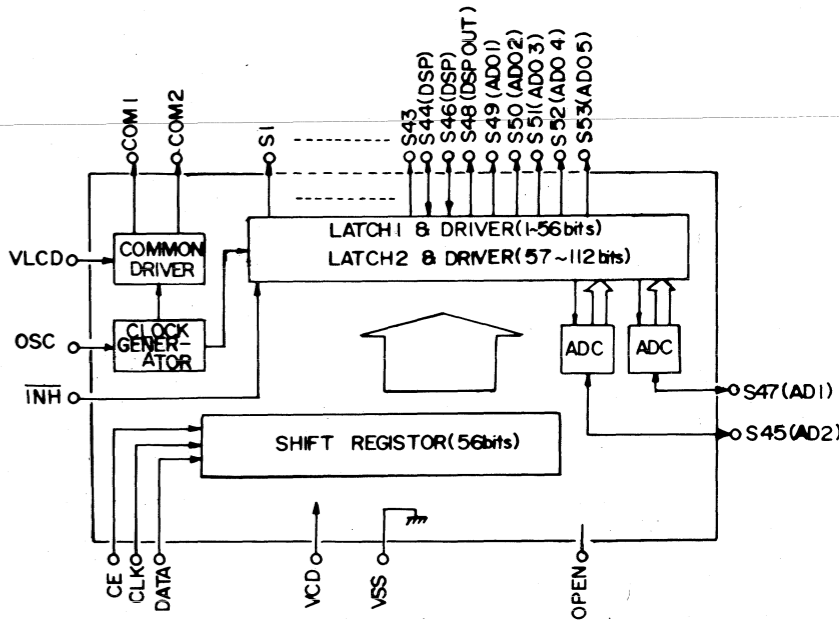
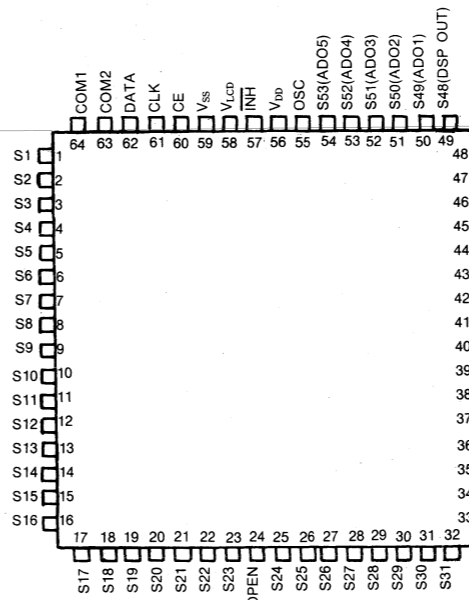
2. BA3312N (KIC3) LINE IN AMP



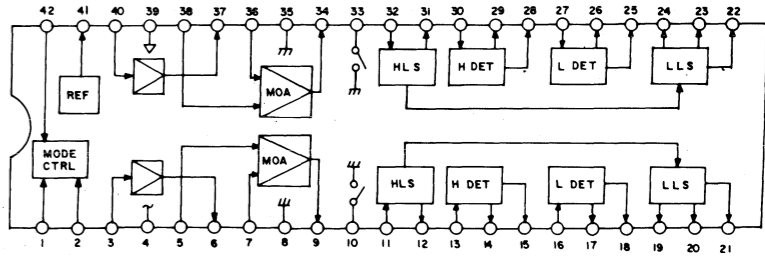
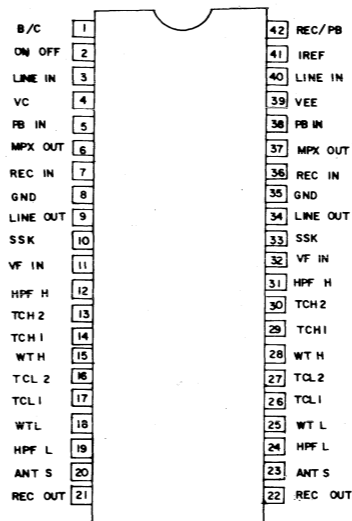
3. BA6251 (KIC1, KIC2) TR ARRAY AMP



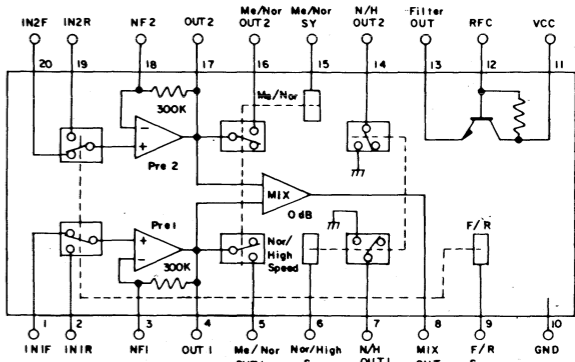
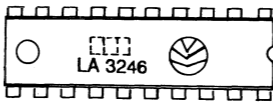
4. LC7582 (UIC2) LCD DRIVER



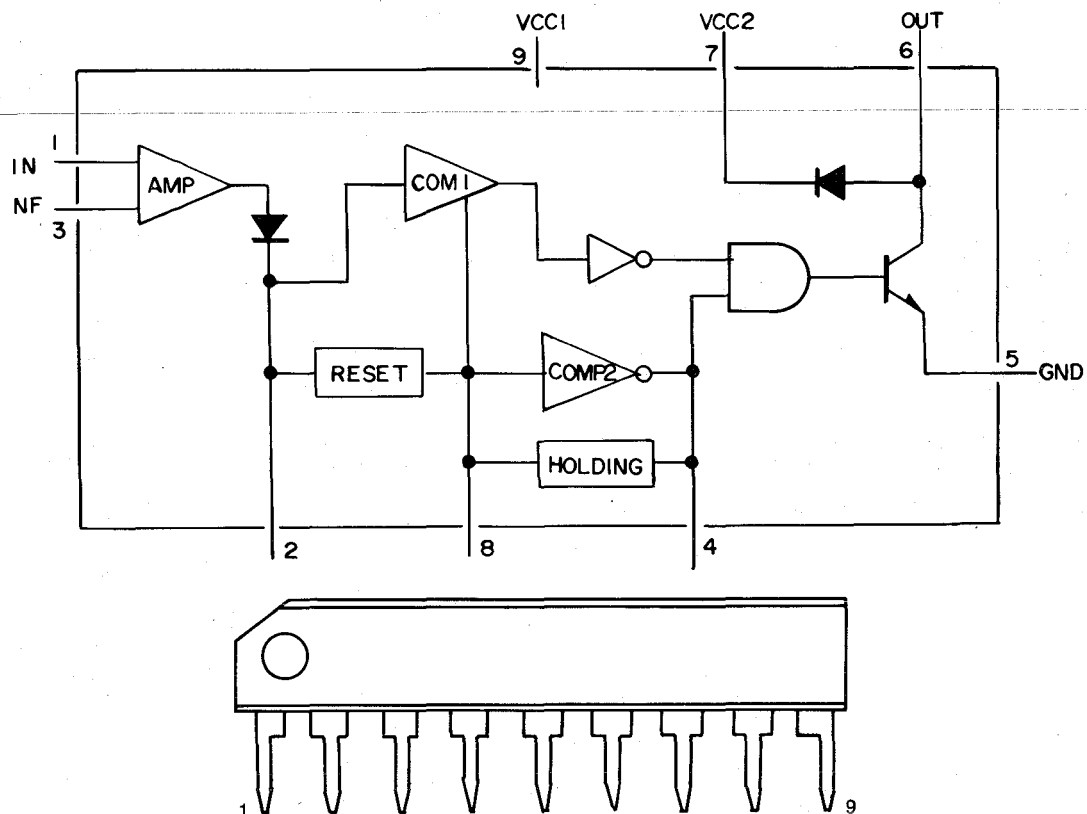
5. CX20187 (DIC1) DOLBY NR AMP



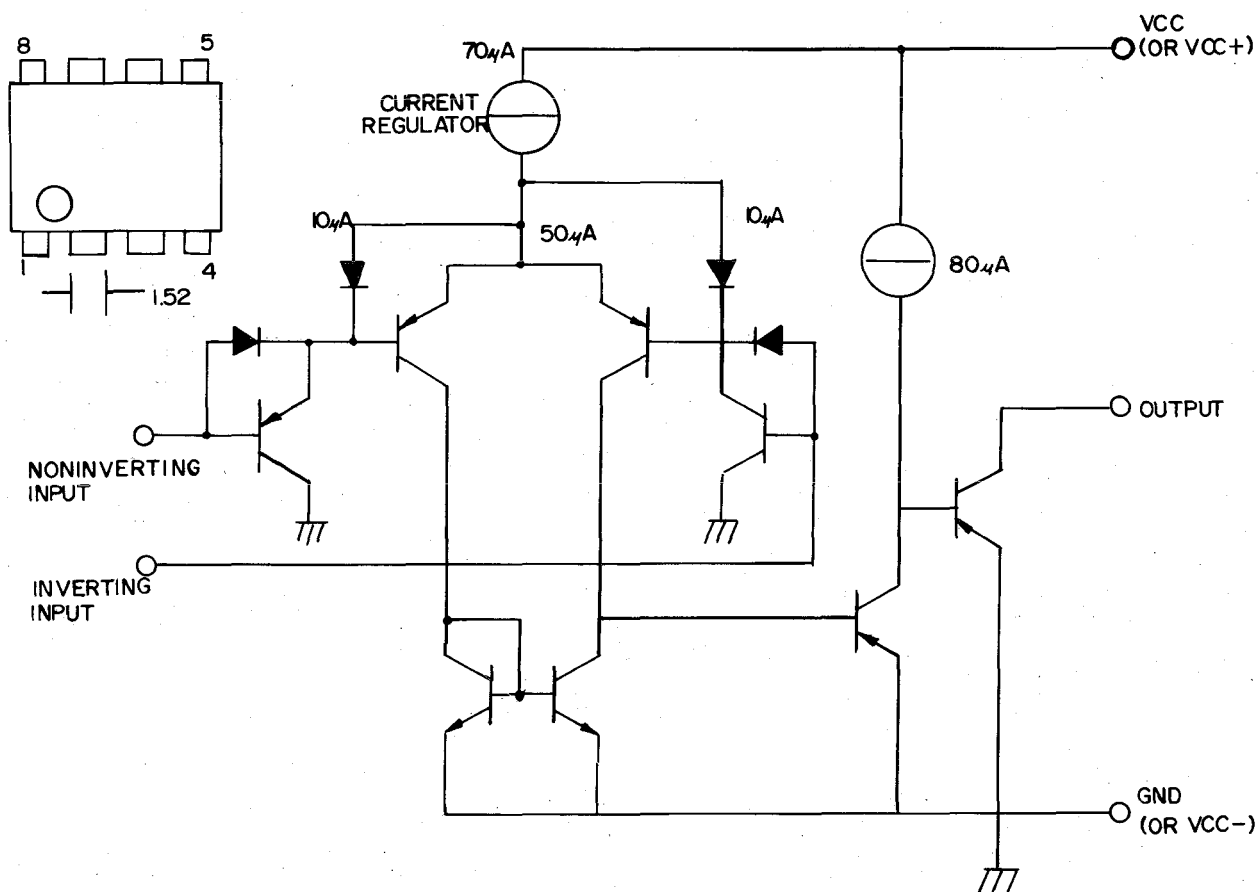
6. LA3246 (JIC1) P/B AMP



## 7. LA2010 (JIC2) AMPS SENSOR

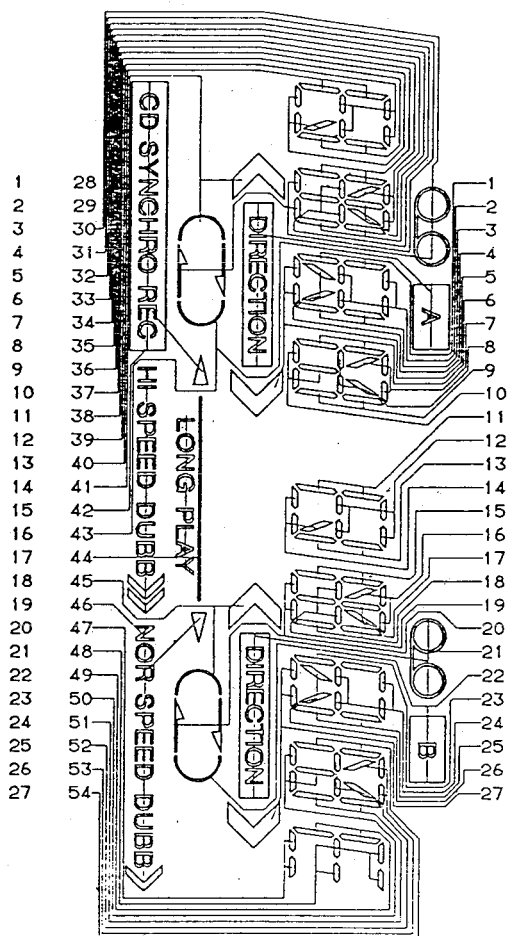
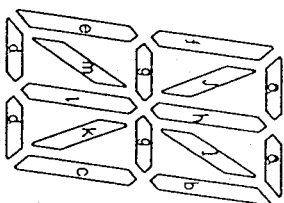
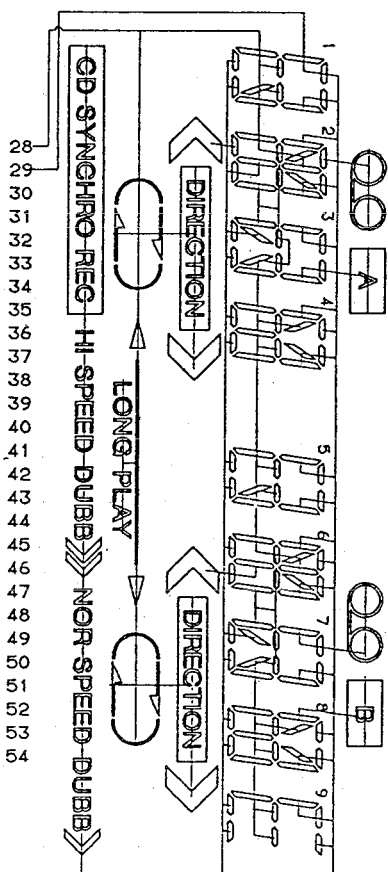


## 8. QUICK REVERSE COMPARATOR

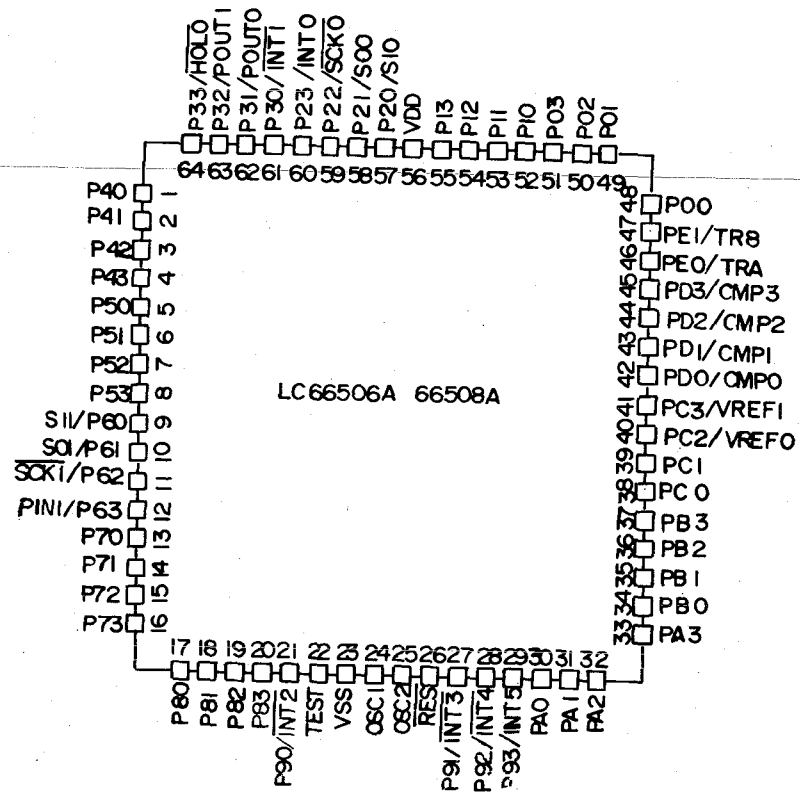


# 9. LCD8085MJP (LCD) DISPLAY

NO.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36		
COM1	3f	3a	3b	3m	3d	4f	4a	4i	4b	4d	5f	5a	5b	5d	6f	6a	6i	6b	6i	6d	Q0 <sup>a</sup>	B	7f	7a	7b	7m	7d	—	COM	Q0 <sup>a</sup>	2d	2i	2b	2i	2a	2f		
COM2	3e	3g	3c	3k	3j	4e	4j	4g	4c	4i	5e	5g	5c	5k	6e	6j	6h	6c	6g	— <sup>B</sup>	Q1 <sup>b</sup>	7e	7g	7c	7k	7j	— <sup>B</sup>	COM	—	Q1 <sup>b</sup>	2e	2g	2c	2h	2j	2e		
NO.	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54																				
COM1	1d	1b	1a	1f	1c	1e	1g	1h	1i	1j	1k	1l	1m	1n	1o	1p	1q	1r																				
COM2	1k	1c	1g	1e	1a	1i	1h	1j	1b	1f	1d	1q	1r	1o	1p	1n	1m	1l																				

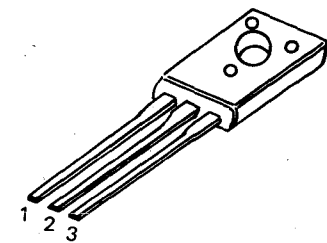


## 10. MICOM (UIC1)



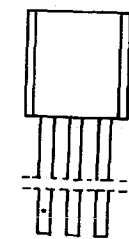
11. TR

- 1) KSD 882-0



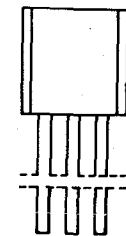
1. EMITTER
2. COLLECTOR
3. BASE

- 2) KSR 1003/KSR 2003



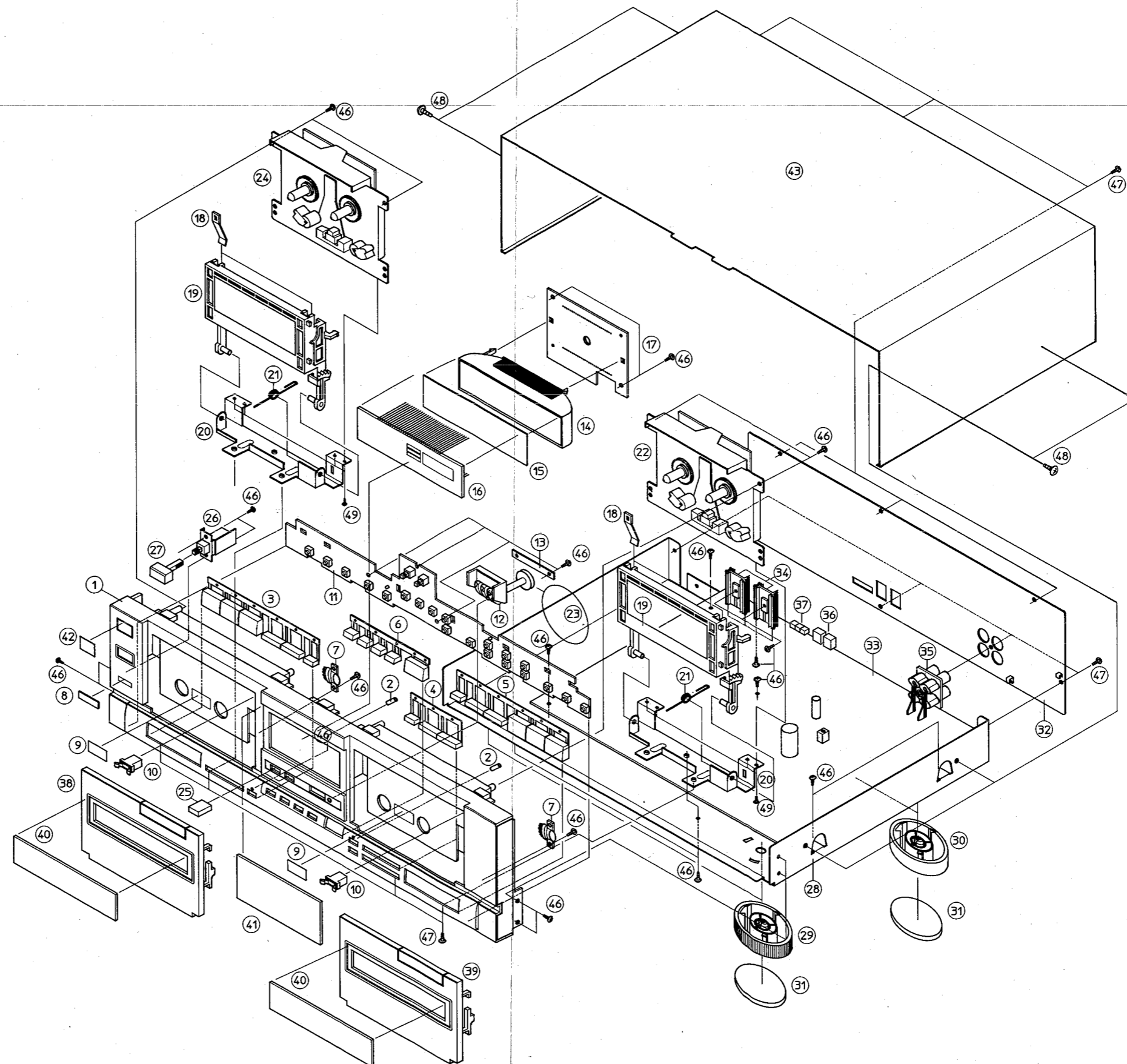
1. EMITTER
2. COLLECTOR
3. BASE

- 3) KSA 709-Y/KSC 1222-L/KSC 945-Y  
/KSC 233-Y/KSC 1008-Y



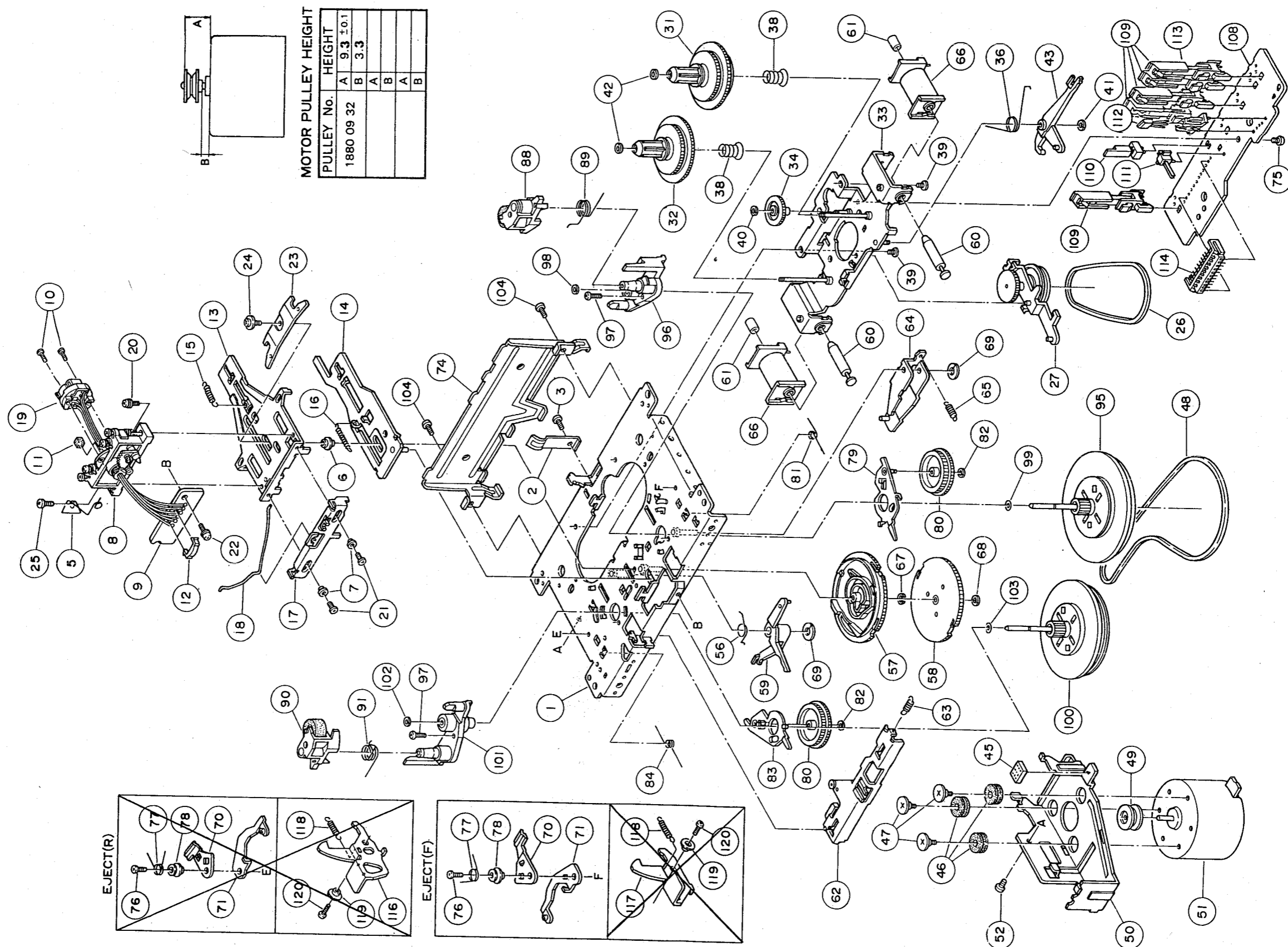
1. EMITTER
2. BASE
3. COLLECTOR

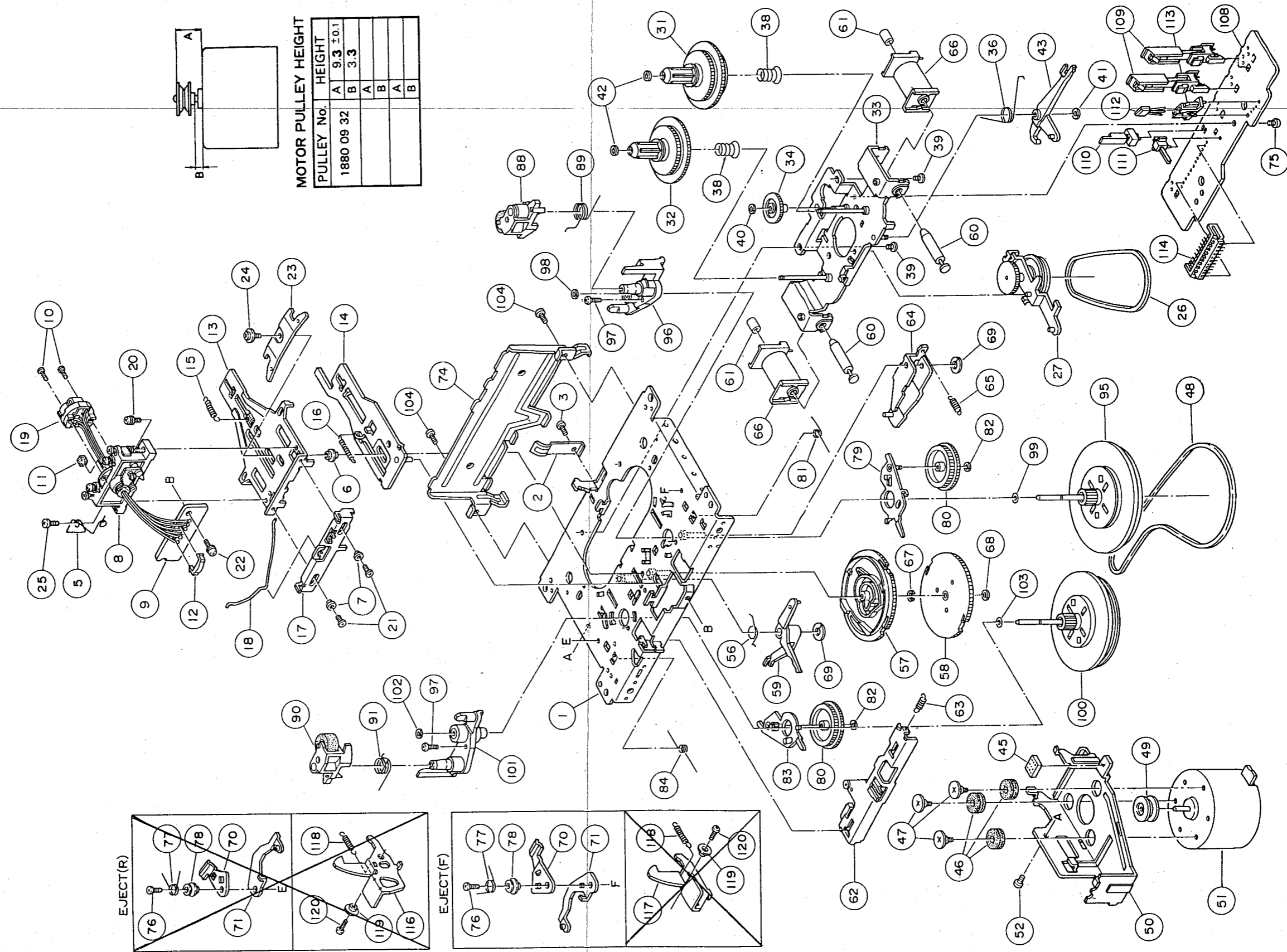
# 15. EXPLODED VIEW



# 16. DECK EXPLODED VIEW

16-1. ASS'Y DECK (PB) (14929-101-640)





# 17. PARTS DESCRIPTION

## 7-1. ELECTRICAL PARTS

IS-1200D MAIN ASS'Y (19013-509-310)

LOCATION NO.	CODE NO.	DESCRIPTION AND SPECIFICATION	Q'TY	NEW	NOTE
RR5	11048-527-209	R-METAL OXIDE; 2P 2.7-J	1	★	
JSR1L, 1R, JSR2L, 2R	11249-112-030	SEMI-VR; RH0615C 22KB	4		
DSR1L, DSR1R	11249-112-040	SEMI-VR; RH0615C 47KB/D8A A03 B54	2		
CSR1, 2, 3, 4	11249-112-140	SEMI-VR; RH0615C 4.7KB/D8A A03 B53	4		
LSR1L, LSR1R	11249-112-210	SEMI-VR; RH0615C 220KB	2		
DIC1	12109-323-880	IC-DOLBY; CX 20187	1		
UIC1	12109-401-200	IC-U COM; LC66508-4517 DECK	1	★	
RIC1, 2	12109-401-690	IC-REGULATOR; MC7812C	2		
KIC3	12119-102-050	IC-EQ; BA3312N	1		
KIC1, 2	12119-102-330	IC-TR ARRY; BA6251	2		
JIC2	12119-201-610	IC-AMPS; LA2010	1		
JIC1	12119-201-840	IC-PLAY; LA3246	1		
CIC1	12119-203-230	IC-COMPARATOR; LM393	1	★	
LQ1L, LQ1R, LQ2L, LQ2R	12139-305-670	TRANSISTOR; KTC 2240-BL	4		
LQ9, LQ8, CQ1, 2, 13, 14	12149-101-570	TRANSISTOR; KSA709-Y, TAPE	6		
DQ3, 8, 10, 12			4		
DQ4L, DQ4R, KQ2L, KQ2R	12149-301-820	TRANSISTOR; KSC1222-L, TAPE	4		
DQ4, 5, 6, 7, 9, 11, UQ2	12149-301-900	TRANSISTOR; KSC 945-Y, TAPE	7		
LQ5	12149-301-910	TRANSISTOR; KSC2331-Y, TAPE	1		
LQ4L, LQ4R	12149-301-930	TRANSISTOR; KSC1008-Y, TAPE	2		
LQ6	12149-401-900	TRANSISTOR; KSD882-o	1		
JQ3, DQ3, JQ5	12159-301-330	TR-DIGITAL; KSR2003, TAPE	3		
JQ2L, JQ2R, JQ1L	12159-301-780	TR DIGITAL; KSR 1003	3		
LQ4, LQ7, DQ1, LQ10			4		
CQ1R, UQ1, LQ3, KQ1L			4		
JQ1R, JQ3L, JQ3R			3		
JD2, 5, 6, 7, 8, 9	12169-301-290	DIODE-SW; 1SS53/1N4148, CT: 6PF	6		
LD3, UD10, UD2, 3			4		
JD4, 5, 6, 7, 8, 9			6		
LD3, UD10, LD6, LD7			4		
LD8, CD3, 4, 5, 6, UD12			6		
LD1	12169-403-200	DIODE-ZN, RD407E/UZ4.7BM	1		
JZD12	12169-403-240	DIODE-ZN; 1W9.4-10.6V UZP-10B	1		
JZD1	12169-404-130	DIODE-ZN; 500MW 5.3-5.9V UZ-5.6BM	1		
KL2, UL1	12429-070-130	COIL-CHOKE; 470UH R-TYPE	2		
KL2L, KL2R	12619-053-911	COIL-CAN: AE 4.7MH 252KHZ BLK	2		

LOCATION NO.	CODE NO.	DESCRIPTION AND SPECIFICATION	Q'TY	NEW	NOTE
KL1L, KL1R	12619-057-417	COIL-CAN; AE 6.8MH 252KHZ BLK	2		
LL1	12619-577-771	BIAS OSC; PCHNS-5371EQJ	1		
KLP1L, 1R	12619-636-471	COIL CAN; AM2.2M HF NON	2		
	13014-579-510	PWB MAIN SUM; 330 x 247 1V-O	1	★	
REMOTE WIRE	13028-904-876	MODULE CORD; 4P/4CX800	1	★	
ERASE HEAD	13029-320-235	CONNECTOR-WIRE; 5264-02 1533 # 28 350	1		
P/B HEAD	13029-339-145	CONNECTOR-WIRE; 5264-03 2547 # 28 450	1		
MOTOR	13029-341-215	CONNECTOR-WIRE, 5264-04 1007 # 26 150	2		
R/P HEAD	13029-369-130	CONNECTOR-WIRE; 5264-06 2547 # 28 300	1		
P/B DECK	13070-019-520	CONNECTOR-WIRE, 51004-09, 51004-09 1006	1		
R/P DECK	13070-012-920	CON-WIRE/B, L FLATE; 51004-12, 51004-12 1061#26 200	1		
DC WIRE	13079-375-245	CONNECTOR-WIRE; PLATE; 5264-05-5264-05 450MM	1		
	13088-324-525	CONNECTOR-WIRE/B, L FLATE; 5264-04 JC25-04 1061#26 250	1		
	13324-500-310	PLUG-PHONO; CONNECTOR 1200MM	2		
	13339-407-060	RCA JACK BOARD; 4P AP4-0091	1		
REMOTE JACK	13339-616-010	MODULE JACK; 616PCB4-D	2	★	
P/B DECK	13349-119-090	CONNECTOR-WAFER; 53014-0910, MOLEX	2		
R/P DECK	13349-119-120	CONNECTOR-WAFER; 53014-1210 MOLEX	1		
	13349-511-110	CONNECTOR-WAFER; 5267-11A TYPE	1		
	13349-511-547	CONNECTOR-WAFER; 5268-05A	1		
	13349-512-561	CONNECTOR-WAFER; STICK 5267-02A 2P TYPE	3		
	13349-512-562	CONNECTOR-WAFER; STICK 5267-04A 4P TYPE	4		
	13349-512-565	CONNECTOR-WAFER; STICK 5267-06A 6P TYPE	2		
	13349-512-569	CONNECTOR-WAFER; STICK 5267-08A 8P TYPE	1		
	13529-203-940	SWITCH-PUSH; SUF 12 25V 1A (NON BURR)	1		
JLPIL, 1R	14529-403-030	30KHZ LPF; A398LLIS-1085	1		
DLP2L, DLP2R	14529-403-040	AUDIO FILTER; 235XHGS-1725	2		
DLP1L, 1R	14529-414-050	FILTER-LOW PASS; 10MM 19K/105KHZ	2		
UX1	14534-504-040	CERAMIC-RESONATOR; CSA 4.00MG CD22	2		
P/B DECK	14929-101-640	DECK (P/B); TN1800-192P	1		
R/P DECK	14929-101-650	DECK (R/P); TN1800-191	1	★	
			1	★	

**S-1200D FRONT ASS'Y (19013-509-320)**

LOCATION NO.	CODE NO.	DESCRIPTION AND SPECIFICATION	Q'TY	NEW	NOTE
REPEAT MUTE	12309-104-550	LED LAMP; SLH-34VC3	2		
CN1	13088-321-220	CONNECTOR-WIRE/B, L FLATE; 5264-11, JC25-11 10 1061# 26 200	1		
CN2	13088-324-525	CONNECTOR-WIRE/B, L FLATE; 5264-04 JC25-04 1061#26 250	1		
JW1-15	13099-500-310	WIRE-JUMP FOR TAPE; TA 1/0.6MM 52X5MM	15		
DSW1-2	13529-203-900	SWITCH-PUSH; SPH 221A	2		
USW2-21	13559-201-040	SW-TACT; KHH 15910 (JTP-1232A)	20		

**S-1200D LCD ASS'Y (19013-509-330)**

LOCATION NO.	CODE NO.	DESCRIPTION AND SPECIFICATION	Q'TY	NEW	NOTE
LAMP	12058-520-820	LAMP; DC12V 100MA 200M/M WAFER	1	★	
UIC2	12109-401-260	IC-LCD DRIVER; LC7582	1	★	
	12339-101-030	LCD; 8085MJP DECK	1	★	
	13014-579-610	PWB LCD; 85 x 58 1V-O	1	★	
CN5	13088-328-515	CONNECTOR-WIRE/B, L FLATE; 5264-08, JC25-08 1061#26 150	1		
	13088-322-520	CONNECTOR-WIRE/B, L FLATE; 5264-02, JC25-02 1061#26	1		

## 17-2. MECHANICAL PARTS

NO.	CODE NO.	DESCRIPTION	SPECIFICATION	Q'TY	NEW	NOTE
1	16001-607-420	PANEL-FRONT	HIPS 94HB BLK	1	★	
2	18004-512-910	LENS-DOLBY	PMMA	2	★	
3	17622-502-210	KNOB-CASSETTE, A	ABS 94HB BLK	1	★	
4	17623-574-010	KNOB-CASSETTE, B(S)	ABS 94HB BLK	1	★	
5	17622-502-110	KNOB-CASSETTE, B	ABS 94HB BLK	1	★	
6	17623-573-910	KNOB-FUNCTION	ABS 94HB BLK	1	★	
7	15214-506-011	DAMPER-ASSY	ACETAL	2	★	
8	18114-538-590	STICKER-REFLECTOR	FASROLL S-266 SILV/H-LINE	2		
10	16604-538-210	DOOR-LATCH	KIFKO LA701	2		
11	19013-509-320	FRONT PCB ASS'Y		1	★	
12	14319-501-680	COUNTER-TAPE	T3SA 130-170-795	1		
13	16624-570-310	BRKT-COUNTER	SECC 1.0T	1	★	
14	16603-509-410	HOLDER-LCD (D)	ABS WHT + TiO2	1	★	
15	17654-559-230	FILTER-LCD (D)	PC0.5T SMOKE WHT	1	★	
16	12339-101-030	LCD	8085MJP DECK	1	★	
17	13014-579-610	PWB LCD	85 x 58 1V-O	1	★	
18	16674-518-510	SPRING-TAPE	SUS T0.35	2		
19	16602-502-410	HOLDER-CASSETTE	ABS 94HB BLK	2	★	
20	16623-610-310	BRKT-DECK	SECC 1.0T	2	★	
21	16674-560-110	SPRING-EJECT	PWR 0.9T	2	★	
22	14929-101-630	DECK MECHANISM, B	TN1800-158	1	★	
23	15274-501-340	BELT-COUNTER	WRT + CR PI50	1		
24	14929-101-620	DECK MECHANISM, A	TN1800-159P	1	★	
25	17624-521-410	KNOB-DOLBY	ABS 94HB BLK	2	★	
26	13529-203-940	SWITCH-PUSH	SUF 12-25V 1A	1		
27	17624-606-110	KNOB-POWER	ABS 94HB BLK (AV-5, SAM)	1	★	
28	16101-501-410	CABINET-BOTTOM	SECC 0.7T	1	★	
29	16072-500-110	FOOT	ABS 94HB HOT STAMPING	2		
30	16072-500-120	FOOT-1	ABS 94HB BLK	2		
31	16804-516-610	CUSHION-FOOT	SPONGE 3.0T BLK	4		
32	16122-535-020	CHASSIS-REAR	SECC 0.6T EXP BASIC	1	★	
33	19013-509-310	MAIN PCB ASS'Y	330 x 247 1V-O	1	★	
34	15684-509-710	HEAT-SINK IC	AL BLK	2		
35	13339-407-060	JACK-RCA BOARD	4P AP4-0091	1		
36	13339-616-010	MODULE JACK	616PCB4-D	2		
37	13349-511-547	CONNECTOR-WAFER	5268-05A	3		
38	17642-527-710	DOOR-CASSETTE, A	ABS 94HB BLK, SPRAY	1	★	
39	17642-527-720	DOOR-CASSETTE, B	ABS 94HB BLK	1	★	
40	17654-558-910	WINDOW-DOOR	ACRYL 2.0T CLR	2	★	
41	17654-558-810	WINDOW-DECK	ACRYL 2.0T CLR	1	★	
42	18024-600-530	BADGE-HI-FI	COPPER 0.3T GOLD (HI FI)	1		
43	16102-506-410	CABINET-TOP	PVC STEEL 0.75T x 658 x 256	1	★	
46	17458-230-101	SCREW TAP TITE, BH	2S-3 x 10 FE FZY	30		
47	17458-230-103	SCREW TAP TITE, BH	B-3 x 10 FZB	11		
48	17128-640-083	SCREW TAP, TH	3S-4 x 8 FE FZB	4		
49	17158-120-052	SCREW-TAP, BH	2-2 x 5 FZW	8		

# HECK PARTS (A, B DECK)

NO.	CODE NO.	DESCRIPTION & SPECIFICATION	Q'TY	NEW	REMARK
9	10000-600-009	RELAY BOARD: 1865-02-34	1		
19	10000-521-013	RP HEAD: HD425558	1		
	10000-521-014	PB HEAD: HD422515			
26	10000-600-026	RF BELT: 1880-07-08	1		
27	10000-600-027	RF CLUTCH ASS'Y: 1880-07-302	1		
31	10000-600-031	T REEL ASS'Y (F): 1880-05-301	1		
32	10000-600-032	T REEL ASS Y (R): 1880-05-302	1		
34	10000-600-034	FF GEAR: 1880-05-08	1		
48	10000-600-048	MAIN BELT: 1880-09-10	1		
49	10000-600-049	MOTOR PULLEY	1		
51	10000-503-002	MOTOR SHU2L	1		
57	10000-600-057	M GEAR: 1880-21-15	1		
59	10000-600-059	M TRIGGER ARM: 1880-21-03	1		
66	10000-600-066	SOLENOID: 1880-21-13	2		
80	10000-600-080	T GEAR: 1880-05-35	2		
88	10000-600-088	PINCH ROLLER ARM (F) ASS'Y: 1880-04-301	1		
90	10000-600-090	PINCH ROLLER ARM (R) ASS'Y: 1880-04-302	1		
100	10000-600-100	FLYWHEEL (R) ASS'Y: 1880-09-302	1		
109	10000-600-109	LEAF SW: MTS-10250MVJO	2		